REVIEWS.

Art. X.—*A Treatise on the Diseases and Special Hygiène of Females.* By Colombat de L'Isere. Translated from the French, with additions by Charles D. Meigs, M. D., Professor of Midwifery and Diseases of Women and Children, in Jefferson Med. Col., &c., &c.: 8vo. pp. 719. Lea & Blanchard, Philadelphia, 1845.

A Practical Treatise on the Diseases peculiar to Women, illustrated by cases derived from Hospital and Private Practice. By Samuel Ashwell, M. D., &c., &c. First complete American, from the last London Edition, with Notes by Paul B. Goddard, M. D., &c., 8vo.: pp. 520. Lea & Blanchard, Philadelphia, 1845.

Were we allowed to infer the progress of our knowledge in relation to any branch of medical science, from the rapid multiplication of works devoted to its consideration, we should certainly have much cause to congratulate ourselves upon our increased acquaintance with the pathology and therapeutics of those diseases which are peculiar to the female sex, for, upon few subjects have there been published, within the same period of time, a greater number of admirable treatises.

And we should not perhaps be altogether in error, in judging that, when a rapid succession of works make their appearance upon any given branch of medical science, not only is there a greater amount of attention directed to its investigation, but that there is in truth a constant addition of facts and observations being made in relation to it. For it is scarcely to be supposed that work after work would be published unless there existed a demand for them, or that any demand should exist if each succeeding publication added nothing to the store of our knowledge.

We believe that this will hold true, at least, in relation to the subject of the diseases of women. To the investigation of their pathology and treatment there has been devoted, within a short period, the closest attention of 'a number of practitioners in different parts of the world, whose means of observation fully enable them to arrive at correct conclusions,—and as a necessary consequence of these investigations, our acquaintance with the true character and diagnostic symptoms of the diseases referred to, and with the means best adapted for their prevention and cure, has been rendered far more full and accurate than it was a few years ago.

The two treatises, the titles of which we have given above, are among the latest and best that have appeared. They differ, it is true, very considerably in their scope and character. The first entering into a very full examination of every question involved in the several subjects embraced in it, and presenting an exposition of the various opinions advanced by the leading authors who treat on them: while the second aims at nothing further than to give to its readers a faithful account of the present state of our knowledge in regard to the pathology and therapeutics of the principal diseases incident to the female sex.

The treatise of M. Colombat is a learned and laborious commentary on these diseases—indicating very considerable research—great accuracy of judgment, and no inconsiderable personal experience. With the copious notes and additions of its experienced and very erudite translator and editor, Dr. Meigs, it presents probably one of the most complete and comprehensive works on the subject we possess. The treatise of Dr. Ashwell, though of a less pretending character, is sufficiently full and accurate, and, in many points of view, is perhaps better adapted as a guide to the student and young practitioner than the former.

M. Colombat commences his treatise with a well-written history of the physical, moral, and physiological changes which take place in females at the principal epochs of life. This excellent sketch forms a very appropriate and necessary introduction to a consideration of the pathological conditions of the female organism. To this chapter Dr. Meigs has added a short but very interesting exposition of the recent views that have been developed in relation to the functions of the ovaries, and the causes and uses of menstruation,—some judicious remarks on the quantity discharged at each menstrual period—and on the period of life at which the function ordinarily commences and ceases in different climates.

The second chapter of M. Colombat's treatise is devoted to an examination of the varieties of conformation, and surgical anatomy of the genital organs, and the sympathies of the womb. This is a highly interesting chapter,—an intimate acquaintance with the subjects embraced in it being essential to a correct appreciation of various important pathological states of the sexual organs of the female.

We apprehend that many, however, of the sympathetic influences referred by the author to the uterus, should more properly be ascribed to the ovaries, which are certainly to be regarded, rather than it, as the source from which the female derives her sexual characteristics, and probably many of her predispositions to certain forms of disease.

The third chapter treats of the manner of examining the female organs by the touch and by the speculum, and of the general indications thence derived. A careful study of this portion of the treatise will amply repay the student for the time spent in it—and may not be uninstructive even to the practitioner. The remarks of the author upon the physical investigation of the uterine organs might, it is true, have been extended, with great advantage, more especially to the student. The more important particulars in relation to the subject are, nevertheless, pointed out with sufficient clearness and accuracy.

These three chapters comprise what may be considered the introductory portion of M. Colombat's treatise—a portion, however, not the least important—the omission of which would have detracted in no slight degree from the completeness and value of the work.

In the succeeding chapter, the author enters upon a consideration of the general causes and classification of the diseases of females.

The general enumeration given by M. Colombat of the causes of the various genital affections in the female, are not obnoxious to criticism; but in the following statement there is a looseness of expression which should be avoided in a scientific work:—

> "As the womb," M. Colombat remarks, "is an organ upon which most of the impressions, both physical and moral, made in the female, are reflected, we ought to count among the most common causes of uterine diseases in great capitals, particularly in Paris, the insalubrious nature of the air, disregard of the

laws of hygiène, protracted vigils, cold and astringent cosmetic lotions for the vulva during or soon after the menses, the use of foot warmers, the abundance of exciting dishes, the immoderate use of ices and sherbet, and of coffee; great political excitements and commotions, secret manœuvres, illicit enjoyments, the distracting and oft-repeated emotions excited by theatrical representations, and the reading of works of fiction; jealousy, disappointed love, loss of fortune, domestic chagrin, joy too strongly felt, frequent fits of passion; and, in a word, all the violent passions and every species of mental shock."—p. 71.

All of the causes here enumerated, are well known to impair the health and produce disease in the female, and as a consequence, the functions of the uterus will become impaired, and even a state of disease may be induced in that organ; but not by the various physical and moral impressions enumerated being immediately reflected upon the uterus. The pathological rank and influence of the latter organ has, we are persuaded, been much overrated by writers on diseases of females; its disturbances of function in the intervals of gestation, at least, are, we suspect, the result very generally of morbid impressions made upon the ovaries, while its diseases are, in perhaps the majority of cases, produced by causes, mostly of a physical nature, which act directly upon it.

The change of life or the period when the menses cease to occur, is set down by the author as a frequent source of sexual disorders. No evidence, however, exists, that the female, at this period of life is in any degree more liable to disease than before; by more than one writer it has, on the contrary, been remarked that there frequently takes place a decided improvement in the general health and a greater exemption from disease when the so-called critical age in females is passed.

M. Colombat divides the lesions of the genitals into:—1. Lesions of form and development. 2. Lesions of situation. 3. Physical lesions. 4. Vital lesions. 5. Lesions of functions. And 6. Lesions appertaining to reproduction.

The first class comprising all cases of vicious conformation, whether congenital or accidental, of the sexual organs and their appendages; the second, all cases of displacement and deviation of the genito-urinary organs,—the third, all cases of lesion of continuity, and the accidental introduction of foreign bodies,—the fourth, the phlegmasia, the transformations, and all the pathological products and degenerations of texture,—the fifth, the neuroses, neuralgia, and functional derangement of the female organs of generation,—the sixth, the accidents, and all the sympathetic phenomena of conception, pregnancy, labour and lactation.

The treatise of Dr. Ashwell commences at once with a consideration of the pathology of the diseases of the uterine system. The affections peculiar to females he arranges into three great divisions. In the first, he places the functional, in the second, the organic diseases, and in the third, the affections of the pregnant and puerperal states.

The general remarks of Dr. Ashwell on the pathology of the diseases peculiar to the female, though upon the whole accurate, are very concise and superficial, and on this account unsatisfactory.

The first section of M. Colombat's treatise, devoted to a consideration of the malformations of the female sexual organs, is particularly rich in facts—it presents a very full exposition of the history, etiology, differential signs, diagnosis and treatment of the various primary and accidental occlusions of the uterine organs—and a very excellent account of the faulty conformations of these organs, whether occurring at birth or subsequently.

Cohesion of the labia, either partial or complete, is by no means of unfrequent occurrence—and the earlier it is detected and the cohesions destroyed, the better. The language of M. Colombat would appear to countenance the erroneous practice of deferring, in cases in which the occlusion of the vagina is only partial, and a free course is left for the urine, the separation of the coherent labia until a short time previous to puberty. Very few instances, however, occur in which there is the least necessity of deferring the operation. In the infant the destruction of the adhesion between the labia is much more readily effected than in after life. There is no necessity then of resorting to the bistoury as recommended by our author—we have in no instance failed in separating the labia by traction alone, or by the firm pressure of a probe upon the line of adhesion, and a similar experience is expressed by Dr. Zeis,* who has recently published a very sensible memoir upon this subject. Nor need we, in order to prevent a reunion of the divided surfaces, cauterize one of them, as advised by M. Colombat, with nitrate of silver; the simplest dressings, with due attention on the part of the physician, are all that is required.

Cohesion of the nymphæ is still more frequently met with than cohesion of the labia—the same remarks may be made in reference to the period and manner of operating in this as in the other.

To the author's remarks on the unnatural development of the clitoris, a most singular and, so far as our reading extends, unique case of enlargement of that organ, is appended by Dr. Meigs, under whose notice it fell.

The editor enters his protest, and we think very properly, against the direction given by M. Colombat in cases of morbid contraction of the female urethra to enlarge it by means of the knife:—"In all such cases," he remarks, "when the most delicate probe can be made to pass, the difficulty is easily to be overcome by the daily use of the bougie; beginning with one of a small size, and gradually enlarging it till the orifice has acquired a proper magnitude." Our own experience affords ample proof of the accuracy of this remark.

In a somewhat extended note, Dr. Meigs has also shown, that in the treatment of congenital narrowness or accidental stricture of the vagina, graduated dilatation is all that is required—the use of the knife, as advised by the author, being unnecessary and improper. In illustration of this a very interesting and instructive case is given by Dr. Meigs at page 101, *et seq.*

In treating of the lesions of situation of the female genito-urinary organs, M. Colombat considers first the prolapsus of the uterus. This subject is one of great importance, as well from the frequency of its occurrence, the difficulty of remedying it by the ordinary plans of treatment, and the discrepancy of opinion which exists among distinguished practitioners in regard to the use of the pessary, and the proper form and material for the latter.

M. Colombat gives to the subject all the attention which its importance demands. In regard to the different degrees in which the uterus may be displaced in a downward direction—the mode of detecting each, and the various symptoms to which they give rise—the chapter devoted to the consideration of this form of displacement will be found very complete and satisfactory. His examination into the causes of prolapsus uteri are by no means, however, of the same character. These are simply enumerated—and it is very doubtful whether several that are included in the list can, with propriety, be considered as either predisposing or occasional causes of the disease.

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* See No. of this Journal for Jan. 1845, p. 164.

In a note, Dr. Meigs briefly examines the pathology of this malady, and has, it appears to us, indicated the true cause of the frequency of falling of the womb, and the one which, in perhaps the majority of cases, predisposes to its occurrence. Denying that the lateral and round ligaments can have any agency in preventing the descent of the uterus, and consequently that the latter cannot be the effect of a relaxation of these parts, he remarks, that the diaphragm has an antagonist force in the floor of the pelvis, which is partly muscular, and that where that muscular floor retains, together with the other tissues of the perineum, its full power and energy, there can be no prolapsion of the womb.

> "The repeated distensions and dilatations to which the floor of the pelvis is subjected in labour, cannot but tend to debilitate it, and overcome its power of resisting the antagonization of the diaphragm and abdominal muscles, and as the parts that sustain the womb depend for their own support on the firmness of the tissues composing the pelvic floor, it is clear that the womb may go down with them and it. But let it be observed, that the pelvic floor itself is dependent, not merely upon its textural contractility, but on the muscular power of the levator ani muscles—muscles which relax in labour, and in defecation, by a spontaneous power of relaxation, in order to admit of the descent, and protrusion of the pelvic floor in question, and which is restored to its proper level, and drawn upwards, and kept there by the sole power of the levator muscles. Hence it is, I think, clear, both by reasoning, and by observing clinically the facts in the case, that the weakness and loss of power of the levator muscles have much to do with the pathology of prolapsus uteri.
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> "It will not, I suppose," he adds, "have escaped the observation of all persons of experience, that in bad cases of prolapsus, the perineum is thin, feeble in its tension, and that the whole perineum is at a lower level than in those who do not labour under prolapsus.
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> "It is essential," he further remarks, "to observe that weakness and prolapsion of the womb are apt to follow bad labours, and to be coincident with the signs of general debility of the muscular apparatus of the whole body. It is not, indeed, met with, except very rarely, in the strong, active, muscular subject, and that even in these subjects, the prolapsion is rather a state of immobility, or fixedness of the womb at a low level, than a real prolapsus."—p. 124.

If the above views of Dr. Meigs be correct, and we feel persuaded that they will be fully borne out by correct reasoning upon the facts of the case, and by the results of clinical observations, our views in regard to the means of prevention and cure of prolapsus uteri must become greatly modified, and our success in its removal increased, while the cause of the so general failure of all efforts to sustain the uterus in its proper position by pessaries, and other mechanical means, is at once rendered evident.

The entire subject of the pessary, the various forms that have been given it—the advantages and disadvantages of each, and the various accidents connected with the presence of the pessary in the vagina—are all very fully considered by M. Colombat, and some judicious remarks are added by the editor, on the means of prevention and cure of prolapsus uteri. Referring again to the views advanced by him in a note to one of the preceding divisions of the chapter under consideration—Dr. Meigs observes that—

> "In view of the nature of the support by means of which the womb retains its natural situation in the pelvis, it seems to me, every case of prolapsion or procidentia of the womb ought to be regarded as an affection of the vagina, and that the indication of cure confines itself to the restoration of the vagina, and not of the womb as the pathological object."—p. 136.
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> "It hence appears, that in cases of prolapsus uteri, one great object to be held in view is the restoration to the levators of their lost or diminished contractility."—p. 138.

After referring to the danger of prolapsus after long, tedious or instrumental labour, from which the female is very apt to rise with weakened levators, with the rectum feebly supported, and the uterus consequently lower than it ought to be, Dr. M. adds, that

> "In fact, very few women are to be met with in whom, after giving birth to one or two children, the womb is not found very low in the pelvis. * * * Under this view how necessary does it seem that such patients should avoid all causes of tenesmus, such as costiveness on the one hand, and drastic or other harsh purgatives on the other, pessaries of a bad construction, of too large a size, strangury, debilitating discharges of leucorrhœa, and, in short, whatever might serve to promote the descent of the perineal texture, the descent of which is incompatible with a due elevation of the organs, whose support in situ naturali absolutely depends upon them.
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> "I beg leave to remark that, in pursuance of a plan of treatment by rest in a horizontal posture very long continued, the muscular force of the patient is not unapt to be exhausted, and that it is not unusual for persons subjected to such treatment, to rise from a confinement to the bed of several months' duration, not at all amended in health, and consequently, greatly disappointed, if not injured by the treatment. In such patients, a method calculated to invigorate and enhance the muscular energies would be far more likely to produce a cure which would coincide with a rise or elevation of the perineum. Hence, I have, in many instances, found my patients to recover perfectly, when I have counseled them to take exercise, to be much in the air and light, to live upon a nutritious diet, to take wine and malt liquor, and to disregard, as far as possible, the painful or annoying sensations proceeding from the prolapsed state of the womb; assuring them, that probably, in proportion as their general health should improve, so would the local disorders under which they suffered gradually lessen, and finally disappear. I have seen a lady this day, who, at the age of forty-nine years, informs me that she has scarcely been a day or night without a pessary for fourteen years past, an instrument for which she has not the least occasion, and perhaps never has had.
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> "In making these remarks, I desire to apply them to cases where the use of the pessary is a question of doubt, for, beyond dispute, there are many women who can enjoy neither comfort nor health without the aid of these remedies, which, as our author states, are sanctioned by the common consent of the profession for ages past."—pp. 138–9.

Dr. M. has, in the last quoted paragraph, conceded, perhaps, too much to the common opinion entertained by medical men, that the use of the pessary is necessary to retain the uterus in situ in cases in which it has become prolapsed—we candidly confess that we can conceive of but few cases in which the instrument is necessary or can act beneficially, while we have known, in numerous instances, the most decided relief afforded to the patient, and the prolapsus entirely removed by a long-continued hygienic and remedial treatment adapted to restore the tone and general energies of the system.

In Dr. Ashwell we have a warm advocate for the use of the pessary—he has examined some of the arguments that have been brought against it, and said every thing that can be said in its favour. He considers that it would stand alone as a remedy in cases of prolapsus uteri, if it were universally applicable, or if its employment were never attended with inconvenience. He has known many instances, he states, of its employment for several months, no other treatment having been resorted to, where a perfect cure has been obtained; so perfect, indeed, that on removing the pessary, the descent has not again taken place. We may remark, that the views of Dr. Ashwell in relation to the pathology of prolapsus uteri are somewhat vague, and unsupported by correct physiological principles.

We pass over the account given by M. Colombat of anteversion and retroversion of the uterus—merely remarking that the reader will find appended to it a very interesting note by the editor.

The curvature, obliquity and inversion of the womb are very fully considered—and a very interesting exposition is given of the present state of our knowledge in regard to the pathology, diagnostic phenomena, and treatment of each.

Dr. Meigs, in a long note which he has added to the author's account of inversion of the uterus, offers some remarks upon spontaneous reposition of the organ after this accident—he having met with two cases in which the womb not only recovered spontaneously its proper position, but in which the patients became afterwards pregnant—showing that the extremest degree of inversion is not necessarily the cause of lesions to the ovaries, tubes and other organs connected with reproduction, so great as to deprive them ever afterwards of the reproductive power.

In a second note, Dr. Meigs has pointed out a very grave error into which M. Colombat has fallen in his directions as to the mode of proceeding for the reduction of the womb.

The editor saw, in conjunction with the late Prof. James and Dr. Fox, a case in which the womb was not only completely inverted, but had been strongly pulled by the midwife. In which case he pursued, at first, the method recommended by Dewees and other authors, of grasping the globe firmly with the hands, in the view of pushing it back bodily into the pelvis, but was unable to meet with the least success until he had taken off the placenta, which still adhered, though detached in certain parts of the surface and much torn.

> "After I had removed the after-birth," remarks Dr. M., "I found that the organ became alternately soft and rigid, just as happens after delivery in an ordinary labour: and I farther observed, that to handle it was to irritate its contractility and to harden it, which rendered it obdurate against every attempt at reduction. I was compelled, therefore, to do what M. Colombat so pointedly condemns; *i. e.*, to wait until it became relaxed, and then to indent the fundus and to drive that cone through the centre of the globe, and up through the cervix and os uteri, until I had carried my hand so high that the external organs contained my arm not more than four or five inches below the elbow. I feel very confident that if, *in any case*, I could succeed in indenting a fundus uteri and in bringing the cone up to the os uteri, I could always perfect the operation by gently pressing that cone against the ostium uteri, which, under a persevering maintenance of the pressure, would yield as readily as it does to a labour-pain, or to the cone of the hand, when introduced in cases of hourglass contraction or spasm of the cervix under encysted or retained placenta." —p. 187.

Of the various other lesions of situation of the genito-urinary organs of the female, the reader will find a very excellent account given by the author. Of the present state of our knowledge in relation to the character, phenomena and management of these accidents he has, generally speaking, presented a very accurate exposition—which is rendered still more interesting by the several additions made by the very able editor.

The third section treats of the physical lesions of the sexual organs of the female. These are comprised under three divisions:

1. Contusions, wounds, and lacerations of the vulva, perineum, vagina and uterus,—ruptures of these organs,—and, finally, contusions and wounds of the mammæ.
2. Vesico-vaginal, utero-vaginal and recto-vaginal fistulas; and,
3. The accidental introduction of foreign bodies into the genital cavities.

The short account given of the causes and treatment of contusions of the labia majora is sufficiently explicit, considering the nature and comparatively unfrequent occurrence of the accident. The more important subject of rupture of the perineum receives a more extended consideration. The account given of it by M. Colombat constitutes, indeed, one of the ablest sub-sections of his treatise. A curious case is related, in a note by Dr. Meigs, of a female, in whom, from a rupture of the perineum, there existed "an opening, extending from the posterior half of the anus to the anterior commissure of the vulva, or what might very properly be called a cloaca; for the anterior perineum had wholly disappeared, and along with it all the anterior circumference of the lower part of the rectum, whose anterior margin the doctor felt up within the cloaca, and lying near the sacrum." Under such circumstances of loss of substance and structure, she had borne three children, at the period when her condition was first detected by Dr. M., and has had three others since that time. She assured the doctor, that except when she labours under some diarrhœa or looseness of the bowels, she has not the least trouble on account of her condition,—discharging her fæces at regular and stated times, and with the same facility as a person in health might enjoy. Moreover, her health is good.

Rupture of the uterus receives from M. Colombat all the attention which the serious character of the accident demands.

The various opinions that have been emitted in regard to its predisposing and determining causes are enumerated. It is doubtful, however, whether many of the causes assigned as those predisposing to or producing rupture of the uterus have any agency in its production. In the only two cases which have fallen under notice, the uterine parietes at the place of rupture were manifestly softened, and in one, there existed a spot near the base of the uterus, which had not, however, given way, that was so nearly of a gelatinous consistency that the finger could be passed through it without difficulty. In this instance the rupture took place in the very first stage of labour, before any very severe pains had occurred, and previously to the head of the child being fully engaged in the pelvis. We noticed in neither instance the sudden occurrence of a violent pain and the piercing cry of the patient, enumerated among the symptoms of this accident by M. Colombat and other writers.

Upon the whole, however, the account given by the author of the phenomena, nature, and management of rupture of the uterus is a very excellent one. Nearly all, also, that is known in regard to the causes and phenomena of ruptures of the vagina, and the mode of treating the consequent vagino-vesical and recto-vaginal fistulas which result from these accidents, will be found recorded in the work before us in the sub-sections devoted to their consideration.

In the ensuing section, among the other vital and organic lesions of the sexual organs, M. Colombat treats of prurigo of the vulva, a very common and most distressing malady. He presents the usual account of its symptoms, and enumerates the various remedies that have been recommended for its removal—all of which we have employed often without, however, seeing any benefit result from either of them. The local applications that have appeared to us to succeed the most frequently in allaying the intolerable itching, are a strong solution of the borate of sodæ in water, and a watery infusion of opium. Dr. Meigs, in a note, recommends a solution of half an ounce of the borate of sodæ in eight ounces of distilled water of roses, with the addition of six grains of sulphate of morphia, to be applied thrice a day to the affected parts, by means of a bit of sponge or a piece of linen, the surface being first washed with tepid water and soap and well dried. Dr. M. states, that he has rarely had occasion in any case to order any other remedy. It is remarkable that this gentleman has never met with cases of pruritis vulvæ attended with an aphthous condition of the inner surface of the genitals—neither is the fact referred to by M. Colombat. We have noticed the aphthæ in many cases of pruritis vulvæ occurring in the unpregnant female—but in the cases occurring during gestation, the appearance of the parts affected, where we have had an opportunity of examining them, have most generally corresponded with those described by Dr. Meigs, though occasionally the pimples, in the different conditions described by the author, were present.

Dr. Ashwell, in his chapter on this affection, quotes from Dr. Oldham a very interesting account of follicular inflammation of the vulva, and the plan which he has found most successful for its cure. We have reason to believe that this disease is by no means of unfrequent occurrence.

It consists of a number of slightly raised highly vascular points, clustering around the elevated border of the orifice of the urethra, and skirting the margins of the nymphæ. It does not extend to the labia, or vestibule, or clitoris, or vagina. The inflamed points are sometimes isolated and small, but as the disease progresses, several of them coalesce, and here and there a minute speck of ulceration may be seen in their centre—little or no swelling is present. Dr. Oldham's cases occurred in married women, of nervous and excitable temperaments, who had borne the disease for a long time before the parts were examined and its real nature detected. It is attended with a severe, smarting, shooting pain in the vulva, which renders the sitting posture exceedingly painful, and is much increased by walking. Sexual intercourse is attended with intense suffering; the sphincter vaginæ is so contracted as to cause an accumulation in the vagina of the abundant leucorrhœal discharge by which the disease is accompanied. The slightest touch or handling of the inflamed parts causes intense pain. Menstruation and gestation are not necessarily interrupted. "When once the finger passes beyond the ostium vaginæ, no farther pain is experienced in tracing it along the canal, or feeling or balancing the womb; but a quantity of puriform fluid, which had freely bathed these parts, passes out with the finger. The patients do not complain of pruritis so much, and there is little fear of friction;

neither, indeed, is micturition painful, although the under edge of the urethra is commonly affected. The general health issoon impaired, and the patient becomes hysterical, and far less able to endure the local sufferings."

The treatment Dr. Oldham has found most successful, is the administration of the liq. hyd. bichlor. ʒj, in the compound decoct. of sars. with the extract three times a day, and freely anointing the parts with an ointment composed of hydrocyanic acid ʒij, and acetate of lead ʒj, well rubbed up in an ounce of the cocoa nut oil. During the treatment the patient is to be kept, as much as possible, in the recumbent posture, without absolutely restricting her to it. She is to observe the utmost cleanliness, and guard against cold. Change of air contributes greatly towards restoring the lost strength, and diminishes the constitutional irritability which soon appears in the course of the complaint.

A short account is presented by M. Colombat of the acute inflammation of the vagina, and a much more complete and elaborate exposition of the pathology of the most usual forms of acute metritis—which merits a careful perusal on the part of the young practitioner upon whose mind the premonitory symptoms and usual course of the disease should be strongly impressed,—for, in the more acute cases, especially those occurring subsequently to parturition, it is only by prompt measures, early commenced with, that the disease can be arrested and the life of the patient preserved.

The frequent and distressing malady known as rheumatism of the womb, is not noticed by M. Colombat, but the editor has appended an excellent account of it, translated from M. Cazeau's treatise on Midwifery.

Chronic metritis is next considered by the author, under the several forms of subacute and simple inflammation without engorgement—chronic inflammation with engorgement—subacute and chronic catarrhal inflammation—inflammation with ulceration—inflammation with granulations. The diagnosis and treatment of these several forms are laid down with great clearness—a matter of some importance to the inexperienced practitioner, for by an early detection and discrimination of the chronic inflammations of the uterus and their judicious management, much discomfort and suffering may be spared the patient, and no little discredit to the practitioner. The treatment directed by M. Colombat is in general based upon correct therapeutical principles.

The consideration of leucorrhœa belongs of course to this portion of the treatise, it being very properly regarded by M. Colombat as the result, in the majority of cases, of an inflammation of the lining membrane of the uterus and vagina—he might probably have extended the inflammatory character to a larger number of cases than he has seen fit; and the accuracy of referring the disease in any instance, as the author has done, to "a state of general or local atony," may be doubted.

With some few exceptions, M. Colombat's account of the pathology of this affection—including his description of its causes, phenomena, and usual course—is full and accurate, and his directions for its treatment judicious, and in unison with the experience of the most enlightened practitioner.

The chapter devoted to the same subject in the treatise of Dr. Ashwell, is likewise a very admirable one. The same objections may be made to his pathological views as to those of M. Colombat. He has, however, described its treatment with great skill and commendable caution—and with even greater fulness than the other.

It would be impossible to do justice to the accounts rendered by the two authors before us, of the cancerous and other malignant diseases of the uterus, or to indicate to our readers, within any reasonable space, the peculiar merits or demerits of each, even were we to enter upon a formal review of that portion of their respective treatise which is devoted to the consideration of these maladies. By both the subject is very ably treated, and a very clear and satisfactory abstract presented of the state of medical opinion in regard to it—and either treatise may be safely consulted for an account of the nature of the diagnostic phenomena and of the most approved methods of treating the malignant affections alluded to.

In the treatise of Dr. Ashwell, the consideration of the pathology and therapeutics of these maladies is preceded by an admirable account of the various means of diagnosis to be put in requisition in the investigation of the organic affections of the female genitals.

M. Colombat is an advocate for the resection of the neck of the uterus in all cases in which the cancerous affection is well marked, or even when there remains some doubt as to its true nature, if the disease has advanced in spite of the methodical employment of the therapeutical resources that have been found by experience best adapted to arrest its progress.

> "This new and bold operation," the author remarks, "made a great noise in France, and was adopted and several times performed by Dupuytren and Professor Recamier, to whom the science is indebted for the cylindrical speculum. But the hopes which the first results gave rise to not being realized, it was in some sort abandoned by the surgeons who had been its first partisans, when in 1826, the numerous cases published by M. Lisfranc, forced the most incredulous to recognize the little immediate danger usually incurred, and to acknowledge that, when practised in good time, and in the proper mode, it forms the only resource which affords any chance of success in cases rebellious to all other means."—pp. 346-7.

M. Colombat proposes a method of his own for performing this operation—the advantages of which over those of other surgeons he has detailed at some length.

Extirpation of the uterus he condemns, except, perhaps, in cases where the womb, already partially expelled from the pelvis, and, in some sort, detached from the rest of the organism, may, in one sense, be said to have lost its right to inhabit the cavity of the pelvis.

Dr. Ashwell enters into a very able and elaborate examination of the pathology, diagnostic phenomena, progress and treatment of cancer uteri—and presents a very fair and instructive exposition of all the facts which bear upon the subject. These have been collected with great industry, and very judiciously related and arranged.

In regard to recision of the cervix uteri for the removal of cancerous and other malignant affections of this part, Dr. Ashwell gives the following cautious and very sensible judgment:—

> "We cannot wonder, with so many limitations, that Montgomery, Blundell, and Robert Lee, and many other eminent men, should condemn the operation as of scarcely any use, and yet I cannot but think, now that uterine diseases are so much better understood, and the absolute necessity for *early* examination by the speculum as well as the finger, so universally conceded, that opportunities will more frequently present themselves for its justifiable and successful performance. I have often been surprised that so very few, scarcely any, cases

occur at Guy's Hospital in which removal would be at all allowable. Frequently for months, and I may say years, I have anxiously examined with a view to excision, and have been disappointed by finding the disease too far advanced. Hence I have been induced to believe, that in many of Lisfranc's cases, the operation was performed for chronic congestion, not cancer of the cervix. But we may not yet have arrived at a dispassionate and just estimate of its value; and it is more than probable that, hitherto, excision has generally been practised, either in affections not malignant, or at a too advanced period of real cancer.

"The following conclusions are perhaps correct:—

"1. That the operation is an easy one. 2. That excessive and dangerous bleeding is not a necessary accompaniment. 3. That in some instances, for the time over which subsequent observation has extended, cancerous ulceration of the cervix uteri has been cured by it."—p. 298.

With M. Colombat, Dr. Ashwell condemns the extirpation of the entire uterus, excepting in cases of inversion and displacement, as difficult of performance, highly dangerous, and almost uniformly fatal.

In M. Colombat's treatise we have a short account of tympanitis of the womb, to which the editor has appended two notes in which he calls in question the possibility of the occurrence of a true case of physometra. These notes are deserving of a close consideration. We have, it is true, never ourselves met with a single instance of this affection—we cannot, however, infer the impossibility of its occurrence from any *a priori* reasoning—and there is abundant evidence to prove that air may be generated in the different cavities of the human body entirely independent of the decomposition of any matter contained in them.

To those who are desirous of studying fully the subject of polypous tumours of the uterus and vagina, we recommend the account given of them by M. Colombat. Their varieties, the symptoms attendant upon their presence and growth, and the various means proposed for their removal—in fact, the entire subject of their pathology and treatment is presented with great fulness, and illustrated and enforced by numerous apposite facts drawn from the records of surgical science.

The chapter of Dr. Ashwell on the same subject, though more concise and less laboured, is a very good one—and furnishes an excellent abstract of what is known in relation to the causes, character and management of uterine polypi.

There is little difference of opinion between the two authors in relation to the most advantageous mode of operating in the several varieties of polypous tumours which occur within the uterine cavity. Both direct the ligature in those instances in which the polypus is pediculated; M. Colombat, however, considers that in most cases the operation of excision is to be preferred. When we take into consideration, he remarks, the inconveniences and advantages on both sides of these surgical measures, the ligature and incision, we ought not to hesitate in looking upon the operation by the latter as the general rule, and that by the ligature as the exceptional case.

Dr. Ashwell admits that many of the disadvantages attendant upon the use of the ligature, are avoided where a polypus is excised. The latter operation is quickly done, and without pain or injury to the neighbouring structures. But is it quite certain that we can always guard against the risk of excessive or fatal hemorrhage? That there are many polypi which may be so removed does not admit of doubt. From all the facts he has been able to collect, Dr. Ashwell concludes, that "if the polypus be large and of hard structure,—if it be of the white kind already mentioned, as having scarcely any blood-vessels,—if there has been but slight hemorrhage during its growth, and if there be no pulsation in the stalk—excision will be the preferable practice, or, if the operator incline to be cautious, he may noose it first, and either immediately, or in a few hours afterwards, excise below the ligature."

Inflammation of the ovaria and Fallopian tubes receives a short notice from M. Colombat, introductory to a consideration of ovarian dropsy. This affection, too often overlooked by the inexperienced practitioner, is nevertheless of by no means unfrequent occurrence, and when it runs into a chronic form, is apt to produce extensive disorganization and enlargement of the ovary in which it is seated. The account given of the disease by the author is very concise, though in general accurate.

The extirpation of the ovary under such circumstances, as recommended and practised by some physicians, is condemned by M. Colombat, in every case, and this condemnation is reiterated and enforced in a long note by Dr. Meigs—to which we beg leave to invite the particular attention of our readers.

> "I am free to say," Dr. M. observes, "that I look upon operations for the extirpation of the diseased ovary, as not to be justified by the most fortunate issue in any ratio whatever of the cases. I apprehend the ratio of success hitherto obtained, as not justifying the operation."—p. 415.

The account of ovarian dropsy contained in the treatise of M. Colombat, is a very admirable one. The several changes of structure in the ovaries giving rise to the disease are accurately described. The gradual and insidious progress of the tumour is well portrayed—its diagnosis carefully laid down, and what little is known in relation to the proper treatment of the disease, very clearly stated. It has been our misfortune to have under our care a large number of cases of this affection, and must confess that we have seen very little benefit result from whatever plan of treatment was instituted,—all the patients finally sank under it—some apparently from mere exhaustion, but the greater number from the sudden occurrence of acute peritonitis. The remarks of the author on the operation of tapping are just; that operation may occasionally, it is true, afford relief by reducing for a time the size of the tumour—still the good which results from it is almost always ephemeral, the collection reappearing after each operation with a constantly increasing rapidity. We have never seen any case in which the uterus, intestines or other of the abdominal or pelvic viscera were wounded in performing the operation, nor in which any serious hemorrhage resulted from it, but we have repeatedly known it to be followed by a state of extreme exhaustion—and still more frequently by an attack of acute peritoneal inflammation terminating quickly in death.

In Dr. Ashwell's treatise there is also a very full and able account of the various diseases of the ovaries. The remarks of the author upon the character of these affections are, in general, judicious and borne out by the results of experience, and by the facts brought to light by pathological anatomy. His description of the phenomena, local and general, by which they are attended from their commencement, throughout their progress and until their close, is particularly accurate, while his remarks upon their therapeutical management and the various operations that have been proposed for the radical cure of the enlarged and dropsical state of the ovaries, are marked by good sense and commendable caution.

With regard to extirpation, he remarks:—

> "The extirpation, we are assured, by the operators themselves, in a fit case, is far from difficult,—would that it were more so—for then it would not be so readily undertaken. If it required as much surgical knowledge and skill to make these large and brilliant abdominal incisions, as to tie the subclavian artery, or to perform a trying operation of lithotomy, the lives of many women would have been already spared, and fewer would be sacrificed for the future. What would be thought of the feasibility of any other operation involving life in the most imminent hazard, if we discovered that out of 67 cases where it had been attempted, it was, *from absolute error of diagnosis, incapable of completion in eighteen;* that of the remaining 49 patients, where the extirpation was effected, *sixteen died* and *two were not cured,*—so that out of the whole number 67, *the operation failed* in *thirty-six, and succeeded in thirty-one,* less than one-half. Such results are distressing, especially when we hear no greater doubt expressed about the operation itself, but only higher confidence in its value, and greater laudation of the operators. We willingly concede presence of mind and ability to many of the extirpators of ovarian cysts; but we are unable to discover (for the later operations have been quite as unsuccessful, from unfitness of the cases, as the earlier ones), that any advance has been made in diagnosis. Nor, when the tumours themselves are examined after death, when the malignancy of many of them is recognized, and their firm, almost indivisible adhesions, and their immovable masses of new and morbid substance are brought to view,—it is next to impossible to entertain any sanguine hope, that our means of diagnosis can ever be much improved."—p. 455.

The consideration of cancer of the female mammæ, follows that of the cancerous affections of the female genitals. The pathology of disease is treated at considerable length, and the various modes of treatment that have been proposed to arrest its development or to effect its radical cure, are detailed, and the relative merits of each briefly examined.

The whole subject receives all that attention which its importance merits, while the present state of medical opinion in reference to it is very ably exposed.

The subject of encysted tumours, and of the different kinds of chronic engorgement of the mammæ, which receive from M. Colombat only a very brief notice, might have occupied, with advantage, a much larger space. Of extremely frequent occurrence, often very obscure in their character, they are frequently the source of much uneasiness to the patient and her friends, and of no little trouble and anxiety to the practitioner.

The fifth section of M. Colombat's treatise is devoted to the lesions of function of the female genitals. Among these, derangements of menstruation occupy, of course, a very prominent rank. As indications of disease of the organs of generation, or of some other portion of the female organism, the derangements of the menstrual function become, it is true, in a large number of cases, all important morbid phenomena. Their pathology has heretofore been but little understood, from our ignorance, until a very late period, of the true causes of menstruation, while their therapeutical management has been, in consequence, uncertain or altogether empirical. Too much attention has been directed to re-establish the regularity of menstruation by remedies which are supposed to act immediately upon the uterus, from a supposition, erroneous in the greater number of cases, that whatever disease the patient may labour under, it has its origin in, and is kept up by the non-appearance, cessation or disturbance of the menstrual flux.

Dr. Meigs, in a note at the very commencement of this section, has presented a concise sketch of the modern doctrine of the nature and causes of menstruation, which throws much light upon the disorders of this function, and their proper therapeutical management.

M. Colombat divides all the lesions of menstruation into two principal heads.

> "The first comprehends: 1. *Menophania*, or non-appearance of the first menstruæ. 2. *Dysmenophania*, or difficult establishment of the first menstruation. 3. *Menostasis*, or amenorrhœa from retention. 4. *Amenorrhœa*, properly so called, or suppression of the menstruæ. 5. *Dysmenorrhœa*, or incomplete and painful discharge of the menstrual fluid. 6. *Menometastasis*, or deviation of the menstruæ. 7. *Menopausis*, or the cessation of the discharge at the critical period.
>
> "The second class, or *hypermenorrhœa*, includes *menorrhagia* and the different sanguine discharges from the uterus."—pp. 462–3.

M. Colombat, however, very properly remarks that—

> "The menstrual disorders we have now enumerated, instead of forming diseases always distinct, are commonly like other functional disturbances, nothing more than symptoms, or groups of symptoms, resulting from a crowd of latent affections, from different sympathetic reactions, or from some organic alteration which is almost always discoverable by an attentive examination."—p. 463.

In his examination of the lesions of menstruation, M. Colombat treats of them simply as amenorrhœa, dysmenorrhœa, immoderate flow of the menses and uterine hemorrhage. A similar arrangement is followed by Dr. Ashwell, excepting that the latter has introduced a special chapter on vicarious menstruation, these being included, by M. Colombat, under the general head of amenorrhœa.

The account given by both authors of the various forms of amenorrhœa is, upon the whole, tolerably full and accurate. We prefer, however, that of Dr. Ashwell, as being more precise, and exhibiting a more judicious exposition of the therapeutical management of the several cases in which the menses may not be established at the usual period, or become suppressed subsequently. Some excellent remarks are presented by the latter upon the various articles proposed as emmenagogues, their relative value, and the circumstances under which the exhibition of each may become proper and beneficial.

Dysmenorrhœa receives a very brief notice in the work of M. Colombat, and one by no means satisfactory. Dr. Meigs, in a note, has supplied, in part, the deficiency of the author, by appending an account of dysmenorrhœa from stricture of the canal of the cervix uteri, which was first pointed out by Dr. Mackintosh, who proposed to overcome the stricture and remove the pain attendant upon menstruation in such cases, by dilating the canal with the bougie. The editor notices his own experience in reference to the treatment referred to, and describes the mode of procedure. He likewise points out a form of dysmenorrhœa in which the pain is experienced in the region of the ovaries, sometimes on the right and sometimes on the left, and which he supposes to result from the exalted sanguine and nervous force of one of the ovaries and tubes, coincident with the mensual hyperæmia, and complete development and rupture of a Graafian vesicle.

> "In such a case, the therapeutical treatment indicated would be the reduction of such vital augmentations, to be effected by venesection, by cooling aperients,

> by baths, fomentations, cataplasms, by the application of leeches along the region of the round ligament, and by a blister in anticipation. This method, with the calming and restraining influence of the anodyne enemata, or suppository would suffice, together with the proper hygienic precautions as to dress, diet and exercise, probably to overcome the morbid tendency of the functions."—p. 482.

A much more complete and accurate account of dysmenorrhœa—the various circumstances under which it is liable to occur, and a fuller and more judicious exposition of its treatment, is contained in the treatise of Dr. Ashwell. It will be found to comprise nearly every well-ascertained fact in relation to its pathology and therapeutics.

Of menorrhagia and uterine hemorrhage there is in both treatises a very excellent account. We prefer, however, that of Dr. Ashwell, whose pathological views and practical directions agree the nearest with our own opinions and experience. Neither of the authors insists sufficiently upon the employment of the acetate of lead in the several forms of uterine hemorrhage. By the one it is scarcely mentioned, while by the other, it is not enumerated, as it certainly deserves to be, among the more prominent and effective means for arresting the discharge of blood. Combined with ipecacuanha, in the active forms of the disease, and with opium, in the chronic, it will, according to our observations, seldom fail to do good. Of the powers of the ergot as a means of arresting uterine hemorrhage, we have also considerable experience, and fully concur with Dr. Ashwell in his estimate of its powers.

Dr. Meigs, in a note to M. Colombat's treatise, recommends in perverse cases of metrorrhagia, where the use of astringents is indicated, "a decoction of the roots of the common black currant, ripe, and the roots of the dewberry. A handful of each of these articles is to be boiled in two quarts of water, and after straining the liquor, the patient should take half a cupful occasionally for a dose."

Chlorosis,—which nearly all writers have enumerated among the diseases of the female, mainly, we presume, in consequence of the defect of menstruation by which in her it is attended,—is treated of at great length in both of the treatises before us. The disease, properly speaking, is not, however, confined to females, but is repeatedly met with in children of both sexes, and in men.

Both authors agree that the prominent symptoms of chlorosis are dependent upon a morbid condition of the blood—there being an increased proportion of serum, with a marked diminution of the crassamentum. All the morbid phenomena by which the disease is attended can be readily explained by the defective or vicious hæmatosis, the existence of which is undeniable. M. Colombat considers that the theory which supposes the chlorotic condition to depend upon sanguine asthenia producing vicious hæmatosis, with increase of serum, and diminution of fibrous colouring matter and iron, does not state the true nature of the malady, nor indicate under what pathological influence the disorders of the circulation, digestion, menstruation, &c., make their appearance. He maintains, that to explain all the derangements of the organism, which together constitute chlorosis, we must refer the primary cause of the affection to a general asthenia of the nervous system, and especially of the nerves of the ganglionic portion of that system.

Dr. Meigs, in a long note, admits that the morbid state of the nervous system is present, but endeavours to show that this is in all probability produced by the vitiated hæmatosis, and the consequent unhealthy state of the blood—and in searching for the precise point at which dwells the proximate cause of the disorder, finds it, he presumes, in a morbid state of the lining membrane of the blood-vessels generally, which he considers to be the true organ of hæmatosis. As this hypothesis changes in no degree the indications of cure in cases of chlorosis—upon which nearly all well-informed physicians are pretty well agreed,—it is at least an innocent one; but as in all our pathological and therapeutical deductions it is safest to confine ourselves to well-established facts, we regret that the hypothesis has been advanced by Dr. Meigs, or, having advanced it, that he has not presented us at greater length with the data upon which it is founded, and pointed out, with more clearness the character of the morbid change he has supposed to take place, in cases of chlorosis in the common membrane of the sanguiferous apparatus.

The pathology and treatment of chlorosis, under the various circumstances in which it presents itself, are more elaborately considered by Dr. Ashwell than by M. Colombat. From the study of the former we conceive a more accurate acquaintance with its character, progress, occasional complications, and proper management may be acquired than from the former. The accounts given by both are, however, very excellent—taken together, they constitute a very perfect history of the disease.

Both of the authors before us treat of Hysteria as one of the diseases of the female sex. M. Colombat considers that the disease is strictly confined to the female, and has "its principal seat in the nervous system of the uterine apparatus"—that "it consists of a special and *sui generic* mode of excitation and perversion of this system, reacting sympathetically upon the general nervous system," and further, "that this peculiar excitation, this morbid modification of the uterine innervation may itself have for its origin, either a local irritation, often inappreciable, or a sympathetic one, resulting from a moral cause, and from the pathological condition of some organ or different apparatus with which the uterus has bonds of union more or less direct." The forms of spasmodic disease resembling hysteria often met with in males, however much they may resemble hysteria, the author believes to differ from it in several essential characters. Dr. Meigs adopts fully the views of M. Colombat, and supports them by a long chain of reasoning, not, however, of the clearest or most conclusive character.

The evidence of the frequent occurrence of hysteriform attacks in males is of too conclusive a character not to be admitted by so acute and well-informed an author as M. Colombat, who, however, separates them from hysteria, properly so called. Dr. Meigs does not, however, perceive the force of the author's argument against the uterine nature and origin of the hysteric paroxsym or passion.

> "Not only," he remarks, "the celebrated case mentioned by Sydenham, but numerous published cases of the disorder occurring in males, show that the affection is not confined to women alone; and yet, even admitting that the *womb* itself, or the *ovary*, is not at the foundation of the malady, nor the disturbing force in the malady, we may readily conceive it is in the reproductive tissue, and the reproductive influence or power, that is situated the *fons et origo* of the evil. I conceive," he adds, "the question to be, not so much whether hysteria arises from a disturbing power of the womb, as from a disturbing power of the reproductive agencies implanted in the economy; and I conceive that deviations of that power, or those agencies, whether in *the male* or *the female*, may alike be regarded as *ipsissimas causas* in these maladies."—p. 537.

All this is very good so far as it goes—but it has the misfortune of all the other hypotheses that have been advanced to account for the production of the hysterical disease, to be unsupported by any series of well-established facts.

Dr. Ashwell, whose account of the pathology and treatment of hysteria is replete with good sense, and his deductions in regard to its causes and character are, in general, marked by great judgment and caution—refers its origin to nervous irritation—that portion of the organic nervous system which supplies the organs of reproduction being the most frequently implicated. The disease is liable to be excited, in persons possessed of a peculiar and constitutional susceptibility to impressions, by any circumstance capable of acting upon the nervous system generally, or of any particular part of it.

Notwithstanding the account of this disease given in the treatise of M. Colombat is the most learned and profound, nevertheless, that contained in the work of Dr. Ashwell is better calculated to lead to accurate views of its phenomena, diagnosis and management.

The consideration of the diseases peculiar to the female is followed, in the treatise of M. Colombat, by a chapter devoted to the hygienic rules adapted to the different epochs of her life, and to the particular circumstances under which she is liable to be placed. These rules are marked throughout by sound sense, and are based upon the results of experience and correct views of physiology—their observance would save the female from many of the diseases to which she is exposed, and be the means of prolonging her vigour, health, comfort and beauty.

The sixth section of M. Colombat's treatise comprises the lesions and sympathetic phenomena produced by conception, pregnancy, labour, and lactation. In this section, the author treats of impotence and sterility—of false pregnancy—of moles or depraved conception—of extra-uterine pregnancy—of abortion—and of the morbid phenomena dependent upon the sympathetic influence of the pregnant uterus upon the different functions of the organism—including, among other accidents, a consideration of the important questions of uterine hemorrhage, and puerperal convulsions, followed by a consideration of the diseases connected with the puerperal state.

The whole of this section would well repay the labour of a close and extended examination. The subjects are in general treated with uncommon ability by the author, and, with the frequent and judicious notes of the editor, the section will be found to contain a valuable digest of the present state of medical opinion and experience in regard to the diseases embraced in it. The notes of the editor on the management of cases of uterine hemorrhage during pregnancy, on palpitation occurring at the same period, and on the treatment of puerperal convulsions, are particularly interesting, and add much to the completeness and value of this portion of M. Colombat's treatise. We have, however, extended already to an unusual length our notice of the two works before us, and we shall be under the necessity of confining our concluding remarks exclusively to the account given by the last-named author of puerperal fever.

M. Colombat treats of the disease under two divisions, that of puerperal peritonitis and uterine phlebitis. Under these forms he has portrayed, with great accuracy, the usual phenomena by which the fever is ordinarily characterized—its sudden onset, rapid progress, and too frequently fatal termination, and has pointed out the treatment—active depletion—by which alone ample experience has proved, when early commenced with in the forms described, its fatal progress can be stayed. The therapeutical directions of the author are enforced by Dr. Meigs in a long note, in which he has repeated pretty much the same arguments and considerations which are set forth in his introductory observations, published in connection with the treatises of Gordon, Hey, and others, forming a volume of the Select Medical Library, edited by Dr. John Bell, of Philadelphia.

M. Colombat has not, however, described with sufficient accuracy one of the forms of puerperal fever, which is most frequently met with when the disease prevails as an extensive epidemic. It is not so much his views of the general pathology of the cases alluded to that may be objected to, as the want of precision which marks his history of their symptoms from the onset of the disease, until its period of full development. Nor will the active antiphlogistic treatment directed by the author, and reiterated by the editor, in such cases be found to be so generally successful as the tenor of the enthusiastic eulogy, pronounced upon it by Dr. Meigs, would lead us to suppose. We would not, by these remarks, be understood as objecting to the use of the lancet, particularly in the onset of the disease, but would guard the young practitioner from believing that in the lancet he has a means of so generally and certainly controlling the fatal tendency of epidemic puerperal fever, as the language of Dr. Meigs would lead him to suppose. While it must be admitted that in the generality of cases, depletion, carried to its fullest extent, on the very onset of the disease, is our best remedy in the usual forms of puerperal fever, it is nevertheless unquestionable that, in certain epidemics, the malignancy of the disease is such that no treatment whatever will avail in staying its progress or saving the patient. A just estimate of the value of blood-letting in this affection will enable the practitioner by its opportune use to do much good—an exaggerated estimate of its efficacy, and the disappointment to which this will often lead, will be liable to induce continual distrust of it, even in the cases to which it is best adapted.

The subject of puerperal fever does not fall within the scope of Dr. Ashwell's treatise.

The remaining diseases of the puerperal state described by M. Colombat, are phlegmasia dolens, puerperal neuritis, inertia of the womb, miliary eruption, and the lesions relative to lactation, the pathology and treatment of all of which, with the exception of inflammation of the mammæ, are treated with great conciseness—the author's remarks, in relation to their character or management, presenting nothing of a very novel or interesting character. The account of mammary inflammation and abscess is replete with judicious observations; it is a subject, however, in relation to which we should have expected, from an experienced practitioner, a still more extended notice. The exciting causes and means of preventing this painful affection of the period of lactation, deserve a more complete investigation than has been given to them by the generality of the writers on the diseases of females.

M. Colombat's treatise concludes with some judicious remarks on the hygiene of the parturient state.

In an appendix to the work of Dr. Ashwell, we are presented with a highly interesting and instructive account of the morbid consequences of undue lactation, a subject, the facts in relation to which require to be well understood and duly appreciated by the physician, in order that he may aid in dispelling various popular errors which prevail in regard to it.

Our notice of the two works before us, although somewhat imperfect, will serve to convey to our readers a general idea of the scope and character of each. Notwithstanding both treatises profess to treat of the same general subject, the manner in which the two authors have fulfilled their task differs very materially. By M. Colombat there is displayed great learning, extensive research, and a respectable amount of personal experience, combined with considerable judgment and a much greater degree of caution, in the promulgation of the opinions, whether pathological or therapeutical, which he advocates, than is usually met with in the medical systematic writers of his country. He has had the good fortune, also, to have met, in Dr. Meigs, with an able, industrious and judicious editor, who, in introducing the author's work to the American medical public, has not only given to it a very attractive English dress, but has enhanced materially its value by copious and important additions, which, from his extensive experience in the diseases of females, and well-known habits of investigation, will be consulted with great interest and no little profit. We agree entirely with the editor in his opinion, that "as a text and table book for the student and practitioner," the work of M. Colombat, particularly the edition before us, has no superior in the same department.

The treatise of Dr. Ashwell is a much less comprehensive one—the author also exhibits less pretension; but in his exposition of the pathology and treatment of the diseases embraced in it, is in no degree inferior to the former. Confining himself mainly to the affections incident to the non-pregnant female, of these he has delineated with great ability and accuracy the history, phenomena, diagnosis and general terminations, and presents a very fair exposition of the most approved systems of treatment adapted to each. In reference to one or two subjects, we prefer the account given by Dr. Ashwell, to that contained in the more learned and laboured treatise of M. Colombat. The illustration of each disease that is treated of, by a series of appropriate cases, detailed at length, is a feature in the work of Dr. Ashwell which will be found both useful and interesting. The American editor, Dr. Goddard, has added but few notes. These are, however, in general, very judicious.

As a work for the use of the younger student, the latter treatise will be found, we believe, in many respects, preferable to that of M. Colombat, which is better adapted to those more advanced, and as a work of reference for the practitioner. No medical library can be considered complete, however, that does not embrace both. D. F. C.

ART. XI.—*Human Health; or the influence of Atmosphere and Locality; change of air and climate; seasons; food; clothing; bathing and mineral springs; exercise; sleep; corporeal and intellectual pursuits, &c., &c., on healthy man; constituting Elements of Hygiène.* By ROBLEY DUNGLISON, M. D., &c., &c. A new edition, with many modifications and additions. Philadelphia, Lea & Blanchard: pp. 464, 8vo.

THIS is a new edition of a work which the author published some years ago. We thought that to be a good book; but this is an improvement upon it. The subject of Hygiène has received more attention within a few years than at any former period. People are inquiring more earnestly, and governments have set on foot investigations into the circumstances connected with the human family, and the effects of these upon human health. It is now ascertained, that, though man is to be supported in life, by food and drink; that he is to be protected by clothing and dwellings; that he is to work and to sleep; yet there are a great variety of ways in which these things may be done, and it is not a matter of indifference which of these ways is selected, nor in what measure, nor of what kind, the materials of life are supplied. In former times, when disease and death were supposed to be the work of an unchangeable and, perhaps, a capricious Providence, there was no motive to inquire into the causes, for no knowledge could avail to avert or modify them.

More careful investigations of the laws of physical life show, that these causes are subject to the observation and the partial control of man; and that the manner in which our bodies are sustained and protected; in which their powers are developed and directed, and the purposes to which they are applied, have an important influence upon the fulness and continuance of human life.

Finding that there is something in this matter to be learned, and that there is an object for the knowledge thus to be acquired, men have endeavoured to search out the law of life, and the best means of applying the material and circumstances about them, to their own sustenance. Works of Hygiène have, therefore, come in requisition. The medical profession want them to aid their teachings. The people want them to aid in their self-government. To meet, or, in many cases, in anticipation of this want, a number of books upon health, upon diet and regimen, have been written and published. Some of these, intended for the profession, are based upon and continually refer to the principles of physiological and chemical science, and are elaborate almost to tediousness. Others, intended for the populace, are more diffused and general, suited to the wants of, and as guides for the conduct of, every day life.

Some of these works are good; some are good for nothing. We have an abundance of theories of physical education, of regimen, and of diet. The last the most plentiful, but not always the most discreet. They differ widely one from another because they are built upon different foundations. Writers have very different notions respecting the manner in which the animal functions are performed, and the purposes to which the animal powers can be applied; and, by a necessary consequence, they must differ in regard to the material and form of the substances by which life is to be sustained. Those who considered the stomach to be a mill, a chemical laboratory, a fermenting vat, or a vital organ, could not come to more various conclusions as to the material which should be put into it than do many writers upon dietetics. We do not say that all these works are wrong; but surely they cannot all be right. Most of them contain some truth; some of them contain much that is true. But, unfortunately, many contain error so mingled with sound doctrine, that they are uncertain and unsafe guides.

It cannot be doubted, that the internal capacities of the human body differ as much as the external form, or as the mental faculties. The different habits of men, the various exposures to which they are incident, the uses and abuses of the material and the powers of life, increase these differences and often establish them. These being fixed in the parent may be transmitted to the child, and thus the physical powers and defects, the energies and the weaknesses of the stomach, of the skin, as well as those of the lungs and the brain, become hereditary. With these differences of organic power, we find that the nutriment of one man is the waste of another, and that the habits which would invigorate one constitution would break another down.

But the great difficulty is, that many writers upon health and the means of its preservation, disregard these peculiarities and consider all men as constitutionally alike. They have a limited field of observation, and do not ascertain what is the universal law. Not thinking it necessary to observe every variety of constitution, and in every variety of habit and exposure, they are content with observing a few of one sort, and from these drawing their universal inferences. These they establish as the general law, and thus substantiate it with those who correspond to the pattern, and reject as anomalies all that differ from it. Their standard is the true type; all variations are errors. In some cases the standard was one of disease. None are so fond of theorizing and advising as dyspeptics. What is best for them, they imagine to be the best for all. There is no doubt that all these may be right as far as they go; they reason correctly from their data—but their data are not universal—their rules of life are good for those from whose experience they were drawn—and for whose government they were formed—but not for others. The system of diet upheld by Mr. Graham is good for those who are best nourished by vegetable food—but others are better supported by meat or a mixed diet. Louis Cornaro's practice was good for him and for all other dyspeptics, whose digestive powers had been broken by a course of dissipation similar to his, but those who have had no ailment of stomach, and who have led regular, moderate courses of life, need not go to him for directions how to live. A recovered dyspeptic is apt to talk very much like a converted rogue; thinking that all mankind had been as unfortunate in the moral or physical way as he had been, he wants them to repent and reform. In truth many of these treatises should be entitled *directions for the recovery of health that has been lost*, rather than for *the preservation of health that is yet unimpaired.*

What might have been the best food and regimen for man in a state of health, even if he had not swerved from the original type, and all generations had till now preserved exactly the constitution and organization that our great ancestor possessed, is not for us now to say, nor is it of consequence that we should, if it were in our power. We are aware that many

es are based upon what is conceived to have been man's original
and want, upon what is assumed to have been the primary inten-
f nature. Those might have done for Adam and his family, but
nt books applicable to men as they now are; adapted to man not
was before the flood—or in the savage state; but as he is now modi-
nproved or impaired by civilization.

e man has emerged from the hunter's state, and ceased to depend
vild beasts for food and clothing, and upon the caverns for shelter,
found that the part which devolves upon him, in the work of self-
ance, is capable of improvement, and the observations of every age
dded new principles to the science of hygiene, and new parts for
pplication. This science of health is not the discovery of yester-
r the creation of one day. It is the gathered observations of all
nce man has begun to look upon himself as having any part in the
life. It is enough that every generation should add its share to
eral amount of this knowledge, and that the authors, in every age,
collect all that was previously known, and add thereto their own or
otemporaries' discoveries. It is upon this principle that the work
Dunglison now before us is made up. It does not pretend to be
inal work. It would be a worse book than it is if it were so,
one could, out of his own mind, learn all that his precursors had
red before him.

unglison has comprised within his volume much of what is known
means and methods proper to be used in the management and pre-
n of health, in all their branches and ramifications.

influences of atmosphere and locality, of seasons, of food and
f clothing, of labour and rest, upon the health of man, are all dis-
with learning and ability, in their principles and in their applica-
the varieties of human life.

ive an abstract of all these subjects, or even an analysis, would ex-
r limits. We commend the work itself to the careful perusal of
lers.

chapter upon atmosphere and locality contains more that is new
others, and is of unusual interest to the reader. These subjects
en studied for a long period, and with more success, within a few
an before, and are here elaborately treated.

nown and acknowledged that different diseases prevail in different
, and with a varying degree of fatality. Some disorders are rare
l in one region, while they are abundant and fatal in another. The
e of climate is not only active in the production of disease, but it
important part in the invigoration or the weakening of the body,
no disease is actually developed.

chemical constituents of atmospheric air are always the same.
often mixed with terrestrial exhalations, with the effluvia of vege-
animal decomposition, and these in various proportions and com-
. The density of the atmosphere differs according to many cir-
ces, especially to the elevation from the centre of the earth. We
sufficient data to determine, whether the rare medium on the
, or the denser medium upon the low plain, is the more favoura-
e health of those who live permanently in them. Experiments
at the sudden transition from one to the other is not easily borne.
s who ascend mountains several thousand feet in height, and the

æronauts in balloons, experience some difficulty from the change o of atmosphere. The respiration and circulation become quicken requires more inspirations to bring the usual and needed quantity gen to the air cells. But the permanent inhabitants of those regions do not seem to suffer, or have any diseases peculiar to their Potosi, in Bolivia, 13,205 feet above the level of the Pacific Oce 12,000 people, is not reported to be unhealthy. The practice of tl cians in Calcutta and in some other parts of the low country in Indies of sending some of their patients, who are suffering under the of the lower and hotter regions, to places which are elevated m 7000 feet above the plain, seem to indicate, that a rarefied atmo more favourable to some conditions of the human body than the d of the valley.

But after all, the whole effect of density of atmosphere and vated residence upon human health, is yet to be ascertained; fo ports of travelers and the experiments of philosophers have, as yet, but little that is satisfactory and conclusive.

The effects of heat and cold are better established. The ca the living body to bear great extremes of temperature is wonderfu Back found that, "when the spirit in the thermometer was at 72 below the zero of Fahrenheit," the air was quite endurable. On t hand, Drs. Fordyce and Blagden stayed several minutes in a roon up to 264 degrees Fahrenheit, without suffering. The northern tors found a temperature of 15 to 20 degrees below zero, and winter in it quite comfortably. On the opposite extreme, the Mourzouk is 130 degrees above zero. These show what th body can endure for short periods, but not what is the most favou health and longevity.

In all climates and seasons, when the temperature is below 98 the human body is constantly parting with caloric. This seem a law of health. The calorific apparatus, whatever it may b rates more heat than the system requires, and the surplus is thr through the skin. If this transit be interrupted, the internal orgar cially those of digestion, suffer. Therefore when the atmosp heated above the usual temperature of the body, we find a preva disease in the abdominal organs.

> "The heat of the torrid regions of the globe appears to be particula mental to animal health. The constant excitement induced by the temperature, disposes the intestines to assume a morbid condition unde ing excitant influences. In this way we account for the various deran in the mucous membrane of the intestinal tube, which are so frequent climates and seasons; diarrhœa, dysentery, cholera, &c., with those attendants upon inflammations of the upper portions of the small int liver diseases."—p. 26.

We are glad to see our author set his face against the vague us obscure term *bilious*. The liver is charged with many sins tha belong to it. In some regions, and with many people, all sorts of and intestinal disturbances are charged upon the liver. The epic his surfeit *bilious;* and the dyspeptic thinks his gastrodynia is th of bile. Fevers, in which the liver is as undisturbed as the brain, called *bilious*. So much has this term and the pathology convey crept into popular use, that, in some parts of our country, calon

ea of all bilious complaints, is kept as a family medicine and used as
, without professional advice, as salts are elsewhere.*

e liver seems to be the scape-goat to suffer for all the sins, indiscre-
and negligence of eating and drinking, of inaction and exposure.

his state of irritation of the duodenum, induced too often by undue quan-
quality of aliment, is that of nine-tenths of the affections termed *bilious.*
son, after having dined heartily on a substance difficult of digestion, is
d with heartburn, distensions, great uneasiness, flatulence and constant
tions; yet, although the cause is manifest, he prefers to have the symp-
ascribed to a predominance of bile, rather than to a circumstance, the
of which would tend to curtail him, in the slightest degree, of his enjoy-
."—p. 26.

vated temperature, by rarefying the air, has the same effect upon
spiration as we before said was caused by the air of mountains.
espiration is more frequent and laborious, and the blood less per-
decarbonized, and the system less invigorated.

this way we may account for the great lassitude and yawning induced
mer heats, as well as for the languor and listlessness, and indisposition
tal and corporeal labour, which are so characteristic of those who have
l for a length of time in torrid climes."—p. 28.

rm climates are unfavourable to those who are predisposed to dis-
of the brain and to scrofula. But they are favourable to rheuma-
o gout, and especially to consumption. The benefit of the warm
is to be obtained rather by those who are predisposed to phthisis,
y those in whom this disease is already developed. The advantage
e sought and obtained, in advance of this dread disease, to prevent
ess rather than as a means of cure after it is in full operation, or
s a means of arrest to its progress when established. While the
es are dormant, cold weather tends to irritate them and excite them
n. This may be prevented by removing from the exciting cause
rm climate. But if active inflammation be already established, if
ercles be softened and discharging, the effect of a hot climate is to
ate this destructive process, and hasten the final catastrophe. An
t physician of New Orleans once informed us, that the most pain-
t of his professional duty was the care of those consumptive pa-
hose medical advisers or hoping friends had sent from the north,
advanced stage of their disease, when too late for restoration or
: then the heat of that climate only fanned the consuming flame,
ried the deluded patients to an earlier grave than they would have
the colder regions which they had left behind.

effects of cold and heat are perceptible in the secretions. The
us secretions are diminished and the renal are increased by cold;
rse is the consequence of heat. This is a matter of common ob-
n, and it is noticeable on any sudden change of weather. From
ents performed in South Carolina it was ascertained, that during
colder months, from November to April, the secretions of the kid-
ere to those of the skin as 41 to 29. During the six warmer
May to October, they were as 24 to 40, about an inverse pro-

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were once, in the south, called to see a teething child of eight months.
er said she had given the babe fifteen grains of calomel, and then doubted
to repeat the same dose, as she thought the child *very bilious!* Lancing
and no more calomel relieved the babe.

Cold weather is more fatal to old people, and warm weather is more fatal to children. In Massachusetts, during the three-years ending April 30, 1844, the deaths of persons over 60 years old were 1738, in the six cold months, October to March; and 1295 in the six warmer months, April to September.* In London, they were 1828, in the summer three months of 1841, and 2948 in the winter of 1841-2. The deaths from old age are more frequent in cold than in warm weather. The London bills of mortality for 1841 give 609 deaths from this cause in summer, and 1043 in the winter months. The proportion for the rest of England is about the same.

Mr. Farr, in his letter to the Registrar-General of England, says: "The causes of death, which proved most fatal in the cold months, belong principally to the pulmonary class and the cerebral diseases of the aged; those which proved most fatal in the summer, belong to the diseases of the bowels: but in almost every class there were one or two diseases, over the fatality of which temperature exercised a marked influence." "Persons affected by the following diseases died in greatest numbers when the temperature was low. It has been already rendered probable, that many cases, arranged under apoplexy and sudden death, are the effects of congestions of the lungs—a sort of spontaneous asphyxia, the development of which appears to be favoured by a temperature below the freezing point of water:†

"Apoplexy, sudden death, paralysis, insanity, tetanus, asthenia, bronchitis, pneumonia, pleurisy, hydrothorax, disease of heart, rheumatism, nephritis, diabetes, dropsy, diseases of child-bed, phlegmon, ulcer, mortification, old age, starvation, violent death."†

Of these diseases there died in cold weather 29,122, and in warm weather 20,754.†

Deaths from diseases of digestive organs, in winter, 1982; summer, 2978.†

The whole mortality of England was for three years, 1838, 1839 and 1840, the greatest in cold months, being during the six months ending with September, 499,005, and during the six months ending with March, 542,137.

In Massachusetts, the deaths in the warmer season predominated, being in the warm months 14,859, and in the cold months, 13,286.

Passing by the pages upon atmospheric changes, which are well worthy of the careful examination of the medical student, we come to a few paragraphs upon the effects of light upon health:

> "A marked influence on the animal economy is exerted by light, which is a healthful stimulant to the skin, as it is a special stimulant to the organ of vision. This stimulation is not felt under ordinary circumstances; but when we leave an obscure place to enter into the bright glare of day, when the brain is affected with any febrile or insane delirium, or the eye with inflammatory excitement, it is strikingly manifested."—p. 51.
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> "Privations of light disposes to rest and inactivity."

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* Reports of births, deaths and marriages of Massachusetts, for the years 1842, 1843 and 1844. This is an imperfect report; the last includes 281 out of the 310 towns and cities; Boston is included in neither. The reports are probably accurate as far as they go.

† Registrar-General's Third Report, p. 104-5.

We wish our author had devoted more time to the examination of this matter, and more pages to its exposition. We believe that light is one of the essential elements of good health, and that the complete development of healthy energy and elastic cheerfulness cannot be obtained without it. Light is not a mere matter of convenience, given to assist man in groping his way about the earth; but its effects, we know not how, upon the nervous system, and hence upon all the other systems of the human body, are manifested in the difference between the health and buoyancy of those who live in open day and those who work in mines. We believe it to be a mistake for workmen to place their shops and families, to put their houses in dark lanes and obscure alleys, where the rays of the sun cannot reach and cheer them. Dwellings and shops well lighted, and especially by the direct rays of the sun, are most favourable to the full energy of life. Heaviness of spirit and languor of the functions follow a disobedience of this law of our nature.

The chapter upon locality seems to us the most valuable in the whole book:

> "The various facts, to which reference has been made, exhibit the powerful influence of situation on the health of mankind, and a wider inspection instructs the anthropologist that the whole physical and moral condition of mankind is modified by climate or locality, so that we may at once distinguish the Esquimaux from the American Indian to the south, the Asiatic from the European, the German from the French, &c., &c." "We are enabled to discover, at a glance, the resident of the unhealthy districts of the low country from the more ruddy inhabitants of the mountain region."—p. 95.

Marshy districts have been universally considered as the fruitful sources of malaria, and of diseases that follow in its train. And some districts, the very opposite in their apparent character, are also teeming with malarious influences. The low and boggy lands, the borders of stagnant waters are supposed to be their peculiar seat. Yet the high and dry, the beautiful and inviting situations are, in many places, subject to the same epidemic scourge. Some of the fairest portions of Italy are thus desolated. The high bluffs on the borders of some of the clear running rivers of the west are visited with intermittents, while in other places the low bottoms, bordering upon the same streams, are exempted. In general, this form of fever seems to retreat before cultivation. It prevails more in the newest settlements of the west; more in the agricultural counties than in the villages; and more in these than in the compact cities. It prevails in the suburbs of Louisville, Ky., up to the very pavement; but it is rarely known to originate within the paved streets. Our forefathers suffered from this disease in New England, now it is not known there. But it may return. In other places, it has vanished before the work of cultivation, and reappeared without any assignable cause. The law of its beginning and continuance is yet to be ascertained.

The bills of mortality in various countries and places exhibit a marked difference in the frequency of death, and in the average duration of life of the people who inhabit them.

The proportions of death to population differ widely in cities and countries, as seen by the following table:

Philadelphia,	1 in 45	Boston,	1 in 41
New York,	1 in 37	St. Louis,	1 in 33
London,	1 in 40	Paris,	1 in 32

Naples,	1 in 28	Amsterdam,	1 in 24
Vienna,	1 in 22	Norway,	1 in 54
Sweden,	1 in 41	Russia,	1 in 26
France, Brittany,	1 in 34	Barses Pyrenees,	1 in 50
Belgium,	1 in 43	Savoy, marshy district,	1 in 28
Savoy, mountainous,	1 in 52	" Average,	1 in 42*

It is not so easy to determine the exact proportion of deaths to the population: for this implies an accurate knowledge of the numbers of the living and the dying. Neither of these are enumerated with sufficient accuracy, in this country, to be reliable grounds of calculations. Our census is very imperfect, and our registration of death is, in most places, entirely neglected—and in very few is it complete. And, however accurately the people may have been enumerated, the movements of population, the increase and decrease must change the basis of comparison, so that it could not be depended upon, during the usual intervals of enumeration.

The age at death,—the average longevity, is more easily ascertained, and is a better means of determining the endemic influences of localities upon life. These two principles, the average duration of life, and the ratio of deaths to population, are not one and the same, though they are often quoted by writers of deserved celebrity as identical. They indicate the same general principle, or healthfulness or unhealthfulness of a place; but the specific part may be widely different. If in a town, containing 8000 inhabitants, 100 die every year, there would be an annual loss of 1 in 80. But it is by no means shown, by this, that the average longevity of these people was 80 years. If none died before reaching their eighty-first year, this would be the case, and the ratio and age would be the same. But if 50 of these should die in the first year and 50 in their eighty-first year—then the average longevity would be 40 years, and the ratio 1 in 80.

Nevertheless, some of the ablest writers upon Life Insurance and Annuities, as well as Dr. Dunglison, have fallen into the mistake of supposing the two principles to be identical.

> "In illustration of this error, take Islington with its population of 55,720, we find the deaths for the year only 1 to every 55 of the population, which would appear to be a high healthy standard: whereas, when we examine the average age of death of all the population, we find it to be only 29 years."†

Bethnal Green showed 1 death in 41, at an average age of only 22 years.

Nor is the average age of the living identical with the average age of the dead. In Liverpool the age of the living was 24 years, while that of the dying was only 17 to 18 years. The excess is not always in favour of the living. In some of the districts of London the age of the living was 35 years, and of the dead 27 years 11 months. In other districts the age of the living was 23 years, and of the dead 26 years 5 months. The average age of all alive in Scotland and Prussia is 27 years. In England 25 years. In the United States, north of and including New York, 23 years. In the Southern States, including North Carolina and Tennessee, and all south, 19 years. In these calculations we have omitted the fractions, which would very slightly vary the proportions.

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* The cities are taken from the Journal of Health, quoted by Dr. D. The countries are taken from the tables of the revenue, population, commerce, &c., of the United Kingdom. Part IV., 1834, page 454.

† Report on Interment in Towns, by Edward Chadwick, p. 240-241.

The average longevity differs remarkably in the various departments of France, the counties of England, and the towns of our own country. The age of all, who died in Concord, Mass., during 63 years, was 38 years 10 months. Dorchester, Mass., for 27 years, it was 32 years 6 months. In Plympton, Mass., during 30 years, it was 40 years 10 months. In the whole state, excluding Boston, 1 year, 33 years 9 months.

The proportion of deaths in infancy and old age, differs greatly in various cities. The per centage of deaths, in the extremes of life, is shown as follows:

	Periods.	Per cent. under 5.	Per cent. over 70.
Boston,	1811–39	39	6
Philadelphia,	1821–30	38	6
Baltimore,	1829–30–31–33	44	5
New York,	1 year	50	3
Massachusetts,	3 years	32	16

A great discrepancy of age is shown among different classes living, side by side, in the same climate and locality. Mr. Chadwick, in his report upon the sanitary condition of the labouring classes, has brought forth facts of this nature, new and astonishing. He found, that the average age, at death, of all the members, father, mother, and children, in families of the rich, was in some places double that of the poor.

	Gentry and professional persons.	Tradesmen and farmers.	Labourers, mechanics, servants.
Liverpool,	35 years	22 years	15 years
Wiltshire,	50 "	48 "	33 "
Whitechapel,	45 "	27 "	22 "

In view of these and similar facts, that show the hard lot of the poor, in Europe, their privations in life, and their early death, our author bursts out into a rhapsody, unusual at least, in scientific treatises.

> "What gratifying prospects are afforded by these estimates to the people of this Union! Blessed as we are, with a government whose sole object must be the happiness and prosperity of the States, and where oppression is impossible. With equal laws, and capability of country such that none need perish through want; but, on the contrary, where each, with due temperance and industry, may enjoy affluence, compared with the wretched lower classes of the old world!"—p. 123.

We would that it were so; but, unfortunately, we have seen no ground for such faith. What our governments, either national or state, have done for the health of the people is a mystery to us. If they have enacted any laws, or taken any measures to prevent the beginning and the growth, in this country, of the lamentable state of things that has been shown to exist in regard to the poor of Europe, they have escaped our notice. They have done almost every thing else; but this they have left undone. They have legislated for property, but not for life. They have cared for the lands, the cattle, the money of their constituents, but not for their health and longevity. They have held out encouragements for people to raise the largest crops, the strongest horses, the fattest hogs, and the most active silk-worms; in short, for the greatest productive power of land or beast, but nothing is done for the great producer, the owner, director and enjoyer of all. Congress has surveyed the public lands, and ascertained how much and what sort of crops can be raised upon them; and urged their fruitfulness as a motive for people to buy and settle upon them; but whether these settlers are to live or to die upon those lands, is not thought worth the inquiry. They have taken pains to inquire at how much cost of capital and machinery, and of labour, horse-power and steam-power, of men-power, mines can be wrought, cloth can be made, and ships can be sailed; but how much cost of life, how much deterioration of health and strength are necessary for these operations, these have not received any examination. Whether our manufacturing population is sinking to the weakness and depravity of the operatives of Manchester, or are yet as healthy and live as long as men and women in other employments; these are matters, which our governments ought to inquire into, but which they have not regarded.

Massachusetts is the only state that has provided for the registration of births and deaths, and the causes of mortality. And even this law is not completely enforced. The enlightened city of Boston pays no sort of regard to it. The only attempt which the national government has made to gather any facts in regard to the sanitary condition of the people, was an inquiry into the number of the deaf and dumb, the blind and the insane, at the enumeration of 1840. And these facts were so carelessly gathered, and faithlessly published, as to be worse than useless. The results of that examination are printed with such manifest contradictions and misstatements as would have put to shame a truant school-boy.*

The same diversity of physical and sanitary condition, which is shown to exist among the rich and the poor of Britain, is also found here in this favoured land. We have examined a few towns, and our facts corroborate those of Mr. Chadwick. The difference of domestic condition and of longevity between the comfortable and the straitened classes is not so wide here as it is there, but it is none the less certain. In Dorchester, Mass., the poor averaged 27 years, and the prosperous farmers 45 years of life. In Concord and Brooklyn a similar difference was shown. This partial dealing of death with his subjects is evinced the most among the children. Among the poor of Dorchester, 32 per cent. of all the deaths were under two years of age; among the richer, only 12 per cent. died at that age. On the other hand, 27 per cent. of the prosperous, and only 9 per cent. of the unprosperous, reached or passed their three score and ten years. These facts show that there is, at least, a field of inquiry almost untouched in America, but which we commend to the paternal care of our government to investigate and ascertain the extent of the evils, and the discrepancies which are found in the three towns above-named.

The chapters upon "winter residence" give a good description of all the places on the globe, which are resorted to by the invalid for health. Here we have, in a condensed form, that knowledge of the sanitary value of these resorts, in the south and in the north. These pages will be extremely useful to the physician in his direction of his traveling patients, and to the patients themselves to guide them in their wanderings in pursuit of health.

We have now only space to notice the chapter upon food. To this subject our author has devoted nearly one-third of his work; and these pages are well bestowed upon this topic. He has treated, with proper contempt, the "unprofitable discussion with some naturalists, whether the organization of man prove him more carnivorous or herbivorous?"

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* See this Journal, vol. vii. p. 71.

> "Although man is so organized as to be adapted for living on both animal and vegetable substances, it is not indispensable that he should be enabled to obtain both. In the frozen regions of the north, vegetable food fails him: whilst in the torrid regions, animal food, if it can be obtained in due quantity, is not relished. Accordingly we find nations and tribes which subsist on animal food almost exclusively, and others, by which an animal diet is rarely, if at all, employed. It is in temperate climates that man is omnivorous. * * *
>
> "Scurvy supervenes, whether the restriction be to the vegetable or to the animal. Certain experiments, instituted by Magendie, show clearly, that omnivorous man—omnivorous, that is, from nature and habit,—requires a variety of articles of diet. This he lays down as an important 'hygienic precept;' but it is, of course, inapplicable to those tribes that have been accustomed, from birth, to supply the wants of the body, by a diet exclusively animal or vegetable."—pp. 186, 187.

The elaborate and gratifying experiments of Dr. Beaumont are quoted and referred to by Dr. D. as the basis of his principles of dietetics. So far as these experiments go, they are well; they prove much, but not all, that we desire to know. They convince us, beyond cavil, that in stomachs similar to that of Martin, upon whom the experiments were tried, and in similar circumstances, the same results may be expected. And the same articles of food would be digested in the same time, and with the same ease, as he digested the matters which he had eaten. But as human stomachs and digestive powers differ in different constitutions, and as Martin's stomach and digestive energies may have been modified somewhat by his wound, we are not ready to suppose that this man was a type for the rest of mankind. We wish, therefore, we had many more experiments of the same sort, and those tried upon other constitutions and in other circumstances. Nevertheless we unhesitatingly acknowledge, that Dr. Beaumont has done a good work in his investigations, and deserves the thanks of the profession and the world. for the new light he has given them upon the process of digestion,—a light which, otherwise, might never have reached us.

Cooking is ordinarily considered one of the lowest offices, requiring but little talent and education. It is therefore entrusted to such persons as would not be employed to manufacture our garments. If more skill is provided, it is for the purposes of appetite rather than of health and strength. Cook books are sufficiently abundant; but their object is mostly to pamper the palate, not to aid in the preparations of food which will best nourish the body, with the least cost of digestive power. Few are aware how important judicious cookery is to the health and energy of life, and how much dyspepsia, pain and lassitude is chargeable to the bad preparation of food. We need a reform in these matters, not merely in the kitchens of the luxurious, but in the dwellings of all classes, even in the hovels and cabins of the poorest.

The chapters upon clothing are interesting and instructive, and should be carefully studied by both the professional and the general student.

Bathing is an essential means of health and comfort. This is most sadly neglected. The hands and the face, which are seen of men, receive attentions enough; but the general surface of the body is unwashed, by the greater part of the people, from summer to summer; and by many, after they have passed their youth, the exposed are the only parts of the body that are ever bathed. Beauty and good appearance are, in general, the only motive for the performance of this office, and therefore it is limited to the uncovered skin. But health requires ablutions for the trunk and limbs, as well as for the hands and face.

> "Accustoming the surface to being washed daily, with tepid or cold water, would seem to lessen the tendency, so marked in some individuals, to affections induced by atmospheric vicissitudes, washing the throat or the chest, with cold water, has seemed to diminish the proclivity to inflammatory sore throat, and the different varieties of catarrh."—p. 369.

We wish Dr. D. had spoken more decidedly on this point. We believe, from our own observations and experience, that this daily cold bathing is a protection against the severities of this climate. Where this is done, the circulation of the skin is more active, and the surface more effectually regulates the transmission of the internal caloric.

The domestic bathing room is a matter of luxury, which few families can afford or can be persuaded to indulge themselves with. We do not expect to see this adopted, in the majority or even in a great minority of the houses of our country. But general ablution, with the hands, sponge or towel, is within the means of all, however poor. This should be done daily, winter and summer, with water cold or as cool as the skin can bear, with reactions afterwards.

The other chapters upon exercise and rest, sleep, upon mental occupations, and upon employments, we have not here room even to notice, except to thank the author for them.

We are sorry to see him quote the long list of literary and scientific men and authors who lived to old age, as if they proved any thing. To be of any value, they should give the whole number engaged in these several callings, and compare these with all in other employments. Selected as they are, they only show that some authors live to a good old age, not the influence of their professions upon longevity. The same methods of relation would show a great longevity of every art and calling, to which man has devoted himself. We could select a list of farmers, shoemakers, paupers, and even spinsters, as satisfactory as these, which so many writers have published; and there would be as good evidence of the longevity of these classes.

However, we will not quarrel with a good author on parting, but prefer much to express our general satisfaction with his work.

E. J.

BIBLIOGRAPHICAL NOTICES.

ART. XII.—*A Treatise on the Medical Jurisprudence of Insanity.* By J. RAY, M.D., Superintendent of the Maine Insane Hospital. Second edition, with additions. Boston: Wm. D. Ticknor & Co., 1844, pp. 490.

AT the end of some six years, Dr. Ray has issued a second edition of a work, which was written to supply a void in the medical literature of our language on the subject of insanity. His first intention was to have translated the work of Hoffbauer or of Georget upon the medical jurisprudence of insanity; but finding that either of them would require very copious notes to bring them up to the present state of the science and of the laws, he deemed it better to prepare an original work. That which lies before us, is the result of his labours: it certainly draws largely from the above and other French authors, though the author has not neglected the English authorities, and has exhibited, besides, some originality in the views he has presented, or, at any rate, in the manner of bringing them forward.

In the name of truth and humanity he felt called upon to place before the profession an account of the present state of science in relation to insanity, and to point out certain principles for the more uniform and just decision of the delicate and intricate questions involved in the consideration of the legal responsibilities of those labouring under some form of this disease. He would extend to the laws providing for such cases the same ameliorating influence which science has brought to bear upon the medical treatment of the insane.

With a full view of these considerations, with a conviction of the importance of a careful study of the subject, and with an honesty of purpose—as we believe—which deserves commendation, Dr. Ray has presented us in the present detailed book with the results of his labours. If, as we think, his leaning, and the tendency of his work, are rather too much on the side of humanity, falsely so called, it must be attributed to the fact that he was so strongly impressed with the gross inconsistencies which have marked the decisions of courts of common law both at home and abroad, with the entire absence of any fixed principles by which they have been guided, with the absurdity of the tests which have at different times been relied upon as fundamental evidences of insanity, and with the inadequate and often strange testimony which is brought forward to prove the alleged derangement—that, in his earnest endeavour to point out and remedy these defects, he has fallen into an opposite error, which would render the administration of justice and of the law uncertain, and thus aid many a criminal and malefactor to escape the just penalties of his offences.

It is not enough to say in answer to this, as the author does, that "though he (the criminal) escape the sentence of the law, (by the successful pleading of insanity,) yet society is perfectly secure from the effects of mistake, because the very plea by which he obtains his acquittal, consigns him to confinement," p. 261. The author has in this remark evidently followed too closely his European authorities, who well knew that, by the operation of the laws in their countries, such is always the case. But frequent experience shows that in this country a different state of things exists, and that both the laws and the practice are exceedingly loose in this matter. We cannot, therefore, think that he does justice to the cause of truth and humanity, when he is contented, in a work of the pretensions of that before us, with merely hinting in such general expressions as the above, (for nowhere do we find any more explicit or stringent in its pages) at a great principle in jurisprudence. His duty was to have enforced it with his fullest powers, to have demanded its recognition in the name of humanity, and to have impressed upon the profession, and through them upon the legislators of the different states, the absolute importance and necessity of providing institutions, where both the lunatic and those who are acquitted from crime as such, may be safely guarded and cared for, so that those who are really suffering may reap the benefit of medical attention, while the criminal may be restrained from his criminal acts.

Other blemishes might be pointed out, particularly some of the "modern instances" which appear in the present edition, as illustrative of some of his positions, as the Mercer case—in which insanity had certainly very little to do either with the crime committed or with the verdict of acquittal. We cannot but think that these must detract from the authority of the book, which in other respects is deserving of high commendation.

A brief sketch of the contents will show how thoroughly and extensively the subject of insanity is studied in this volume, and will enable us to point out some of the valuable suggestions which it presents for the improvement of the laws and of the practice of the courts.

The medical jurisprudence of insanity involves two very important questions, the civil and criminal responsibilities of the insane; the former applying to the validity of wills, contracts, &c., and to the management of property; the latter, to the amenability of the insane to the penalties of the law for acts, which, if committed by the sane, would be crimes. The author, in his preliminary chapter, passes under review the legal enactments and decisions of the courts of various countries upon these questions, showing that they have been, and in many instances are still, essentially defective in guarding the interests of the insane on the one side, and of the relatives and of society on the other; that the attempt to lay down any single test of responsibility, which shall afford a rule for its determination, like the attempt to characterize any other disease by a single symptom, is absolutely impracticable; that neither the knowledge of good and evil, of right and wrong, nor the power of design and contrivance, nor delusion furnishes that test; that, in fact, the decision must be made from the concurrence of several symptoms, as in any other disease. Still the frequency of the plea of insanity in defence of crime, and the momentous and perplexing interests which this plea involves, demand some fixed and definite principles, as a guide to the decision of these cases, and which should receive the sanction of legal enactment.

Some uniformity, says Dr. Ray, might be attained, and the ends of justice thus as adequately promoted, perhaps, as possible, were some such enactment as the following passed in every state: "No act done by a person in a state of insanity, or any other condition of mind in which the person is involuntarily deprived of the consciousness of the true nature of his acts, can be punished as an offence; provided, it cannot be proved that the act was not the offspring of the insanity."—p. 53.

It is true, however, that the law can only lay down general principles, the application of which must be left to the discretion of the judicial authorities; for each case will present peculiarities which will compel its decision chiefly on its merits. We do not, however, think that the above provision, wise and proper as it is, is all that the law can do; and we are clearly of the opinion, that as by its terms it declares that no punishment can be inflicted upon the insane, it should also direct that the individual should be so placed that he cannot repeat his offence, and should have the benefit of proper medical treatment.

The law having settled the general principle of responsibility, the question of the existence of insanity in a particular case remains to be decided, and that too by a jury composed, as it generally and almost necessarily is, of men who are entirely destitute of that intellectual training and acuteness which would enable them to penetrate the intricate and, in many cases, almost undistinguishable shades of mental alienation. It is, therefore, the duty of the law to see that every opportunity be given for the full and just examination of the case of alleged insanity by the introduction of witnesses competent to testify. Now it is a notorious fact to all who read the evidence given in such cases, that medical men, in general, however able and well-skilled in the practice of their profession, are not thereby necessarily qualified to speak authoritatively in cases involving the question of insanity, with which they can in general have but little experience, unless they are at the head of establishments for the reception of this unfortunate class of patients. They, besides, know perfectly well, that if they pronounce a man not to be insane, the jury which looks to them for instruction, will be guided by their opinion, and it is natural that, when they feel doubts themselves,—and they will be too apt to feel them in consequence of their inexperience,—they will give the benefit of them to the accused, and thus defeat the ends of justice.

To this there are two remedies, borrowed from the practice of some of the European countries, and especially France, and which have been adopted, we believe, in Massachusetts. Their general use is ably advocated by our author in the work before us. They are, in the first place, the appointment of *experts*, or experienced men as witnesses, who shall examine and report under oath upon the condition of the party accused, as to mental or moral soundness. They should be selected from among those at the head of lunatic establishments, who are in the habit of observing the unfortunate victims of insanity, and are, in consequence, enabled to speak knowingly and authoritatively upon such cases; and they should be liable to be called upon to hold a species of medical inquest, in order that they may be able to instruct the court, and to remove from the minds of the jury, by their report, any doubts which may exist.

In order, however, to enable them so to speak, the second point should be attended to. They must have every proper opportunity to satisfy themselves of the condition of the party under examination; which may be effectually given by enabling them to adopt any one, or, if necessary, all the following forms of inquiry, which are used in France, viz.: the interrogatory, "embracing those means of information which are applicable in a personal interview;" continued observation, consisting in a systematic course of observations continued for some time, as by frequent visiting, watching at times when he supposes himself unobserved, and attention to all he says and does; and an inquest, which is applicable when the others fail, being an inquiry from friends, relations, business connections, &c., into the whole history of the individual, both before and after he manifested what was considered insanity.

By the use of the means here suggested, there can be little doubt that the administration of strict justice will be rendered more certain in all cases of doubt and difficulty. It is better to delay a decision until the *experts* can make up their minds, than by hurrying it to compel them to throw their doubts in favour of a party accused.

We have, in the above remarks, departed from the order of the work, to which we will, in conclusion, only recur to say that Dr. Ray adopts, with slight modifications, the classification of Esquirol in the study of the diseases under consideration. After dwelling with much detail upon the various forms of idiocy, imbecility, mania and dementia, explaining their character and the legal consequences of each, he enters, in as many different chapters, into the examination of delirium, the question of the duration and curability of insanity, of the nature of lucid intervals and the responsibility during them, of simulated and concealed insanity, of epilepsy, suicide and somnambulism, of the effects of insanity upon evidence, of drunkenness, and of interdiction and isolation, so far as they apply to the civil rights and relations.

Upon all these subjects, full information will be found, conveyed in an intelligible manner, and generally enforced by apt illustration and by the authority of some modern writer, or by the author's personal experience, which he has had ample opportunities of acquiring. C. R. K.

Art. XIII.—*Third Annual Report to the Legislature relating to the Registry and Returns of the Births, Marriages and Deaths in Massachusetts, for the year ending May 1st,* 1844. By John G. Palfrey, Secretary of the Commonwealth. Dec., 1844, pp. 110, 8vo.

This document presents the fruits of the law, which we have before referred to, (see No. of this Journal for July last, p. 190), as reflecting such high credit upon the state of Massachusetts; a measure which places her far above the other states of the Union, for no where else on this side of the Atlantic do we find, out of the large cities, any provisions by which the number of marriages, births, and deaths may be ascertained.

Births.—In a population which in 1840 amounted to 537,319, there were in the year ending May 1st, 1844, 14,439 births, being 1 to 37.28 of the population, a proportion which is considered too low by one-fourth. It is much less than the proportion in some of the towns, where, it is inferred, greater correctness has been observed. The average proportion of births to population in England for the four years, from 1837 to 1841, is 1 to 32. In the Prussian states, it is calculated that in the 15 years (1820 to 1834), there was one child born to about 25 persons living. "We may presume," says the reporter, "that there is annually on an average in Massachusetts, 1 child born to about 25 persons according to the census of 1840; on this supposition the number would have been 21,675 in these 263 towns, instead of 14,563, which is only two-thirds as many."

The whole number of living children born in 288 towns, (including some not embraced in the former estimate,) was 14,757, of whom 7399 were males, and 7042 females. In 316 births reported, the sex was not stated. The proportion of females to males is 100 of the former to 105.07 of the latter. Comparing this result with that obtained by observation in the Prussian states, during the fifteen years from 1820 to 1834, where no less than 7,593,017 births are embraced in the estimate, there is a remarkable correspondence, the female births in Prussia being in the average proportion of 100 to 105.97 males. A long series of observations in Philadelphia gives the excess of males at birth over 7 per cent. (*Vide* Dr. Emerson's Medical Statistics, Am. Journ. of Med., Nov., 1831.)

"The proportion of plurality cases to the whole number, 1 in 121 in the returns from the 288 towns, is considerably less than is found to prevail in other countries, and is less than is believed to prevail in this country. This proportion, perhaps, would have been increased had the returns been complete. One physician in this country has attended 1600 cases, of which 1 in 90 was a plurality case. Dr. Collins, in his Practical Treatise on Midwifery, p. 186, says, that in France the proportion is 1 in every 95 births; in Germany, 1 in 80; in England, 1 in 92; in Scotland, 1 in 95; but in Ireland, the proportion is 1 in every 62. Of 129,172 women delivered in the Lying-in Hospital of Dublin, 2062 gave birth to twins."

Marriages.—The 289 towns from which returns of marriages have been received, contained a population of 600,680 in 1840. The number of marriages was 4304, being 1 in 138 inhabitants. This is believed below the truth, as in England, where the proportion of marriages is doubtless much less, but where the returns are more accurate, the average of marriages to inhabitants was in three years (1838 to 1841) 1 in 127; and in the metropolis alone as much as 1 in 101.

Deaths.—The whole number of deaths reported is 8338, exclusive of stillborn. This is, assuredly, much too small an amount in a population of 578,653, being only 1 death in 70. The proportion in England in the three years, from 1838 to 1841, was 1 in 45 of the population. The deaths of females in Massachusetts exceeded those of the males 461; the aggregate was 8338, of which 3712 were males, 4173 females, and 453 not designated.

"Of the 8338, the ages of 7723 are on the returns, whose aggregate is

260,622 years, 7 months and 20 days, averaging 33 years, 8 months and $28\frac{5146}{7723}$ days. The average age in the several counties, as well as in the several towns, is various. This result as to the average is not to be taken too strictly, but only as an approximation, or to be regarded as accidental, and not necessarily indicating a healthy or unhealthy section of the commonwealth. The average age deduced from the registered deaths in England for four years ending June, 1841, was 28.93 years. In the Prussian States it was 28.86.

"The returns would seem to indicate that the months of August and September were the most fatal to human life, and that April, May, June, and July were the most favourable."

Occupations.—The number of deaths registered under most of the occupations is too small to furnish an average age which can be considered as even an approximation to the truth. But, as the reporter observes, if a similar registration should be pursued for a series of years, the accumulation will afford valuable data for this calculation.

"Already a sufficient number have been registered, of a few of the occupations, for establishing a very near approximation to the actual average age; an example is in the class of farmers or yeomen, including gardeners, of whom the number whose age is stated in the three years is 1995, whose approximate average age was 65.47 years."

When the mortality is viewed in reference to the seasons, it appears that the greatest occurred in the month of September, (3051,) and the least in June, (2021;) that the three successive months in which the mortality was greatest, were August, September and October, (8491), and that it was least in May, June and July, (6368.) It also appears that more than one-third die before the tenth year of age.

Deaths from Consumption.—More than one-fifth of all the deaths are marked "consumption."

If, from the whole number reported under this head, we reject all except those which occurred between the ages of 10 and 50, there will remain about one-ninth as the victims of what may be regarded tubercular phthisis. The difference between the numbers of males and females is worthy of note, the latter exceeding the former by one-third.

The deaths from consumption were most frequent in the mild months of May and September, and the smallest number occurred in the cold months of November and January. This appears to have been the case not only for the aggregate of years, but also for each individual year,—a fact at variance with common opinion.

The following tabular statement shows, in an interesting manner, the deaths from some of the principal classes of diseases, as distributed among the months:—

MONTHS.

DISEASES.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	Not Stated.	Total.
Respiratory Organs,	606	522	510	493	528	552	515	613	584	613	722	669	533	7476
Digestive Organs,	83	90	111	239	226	135	83	75	78	84	86	96	171	1557
Epidemics, &c., -	336	329	377	673	804	626	441	343	373	362	394	325	514	5897

From this table it will be seen, that "diseases of the *Respiratory Organs* constitute more than one-fourth of the whole, and prove fatal most in March, (722,) and least in August, (493.) The three most fatal successive months were February, March and April, (2004;) the three least, June, July and August, (1525.)

"Diseases of the *Digestive Organs* constitute less than one-eighteenth of the whole, and prove most fatal in August, (239,) and least in December, (75.)

In successive months most deaths occur in August, September and October, (600,) and the fewest in November, December and January, (236.)

"*Epidemic* and *Contagious* diseases constitute more than one-fifth. They are most fatal in September, (3051,) and least so in June, (2021;) or in three months we have most in August, September and October, (2013), and the fewest in April, May and June, (990.)"

There remain some obstacles in the way of obtaining correct information upon the subjects embraced in Mr. Palfrey's report, which the enlightened gentlemen who regulate the affairs of Massachusetts will doubtless overcome in due time. The present age owe them much for what they have accomplished, and the promising commencement will lead to the most valuable results. May other states soon follow the example of Massachusetts, by making provision for similar reports. G. E.

Art. XIV.—*The Sanitary Condition of the labouring population of New York, with suggestions for its improvement. A Discourse (with additions) delivered on the 30th December, 1844, at the Repository of the American Institute.* By John H. Griscom, M. D., Fellow of the College of Physicians and Surgeons; Physician of the New York Hospital; late Physician of the City and Eastern Dispensaries. New York, 1845, pp. 58, 8vo.

The matter embraced in this pamphlet, was originally addressed in the form of a letter to the chief magistrate of the city of New York. The principal aim of the author in its preparation, was an exposition of the true principles which should regulate the action of public bodies, in matters relating to the health of cities. The importance of the facts set forth by Dr. Griscom, together with the value of his suggestions, were fully acknowledged by the mayor, who transmitted the communication to the city councils, recommending it to their serious attention. After several weeks deliberation upon it, the committee to whom it was referred arrived at the conclusion, embodied in the following language, quoted from their report: "Your committee do not profess to be judges of the subject, or, in other words, they do not think it proper at this time, to go into such a measure," and they recommended that the paper be returned to its author.

We are not at all surprised that the majority of the city magistracy should have felt themselves embarrassed by the charge of a subject which has been so overlooked as to be only duly estimated by very few individuals. Public intelligence has not yet been raised to the point when it can recognize the importance to the cause of true humanity, and the pecuniary interests of communities and States, of adopting all the means necessary to procure and maintain good health among the labouring classes. When some direful pestilence sweeps over a city, then the magistracy think it incumbent upon them to set to work, and, as far as possible, remove the causes which may tend to foster its extension, or favour its ravages. Authority then acts, as though unlimited, seldom hesitating to consult individual rights, in furtherance of measures calculated to promote the good of the public. But in ordinary times, the work of death is suffered to go on as it may, and its agents, almost overlooked by the public, are allowed to operate gently in the destruction of thousands, and tens of thousands more than fall beneath the sythe of pestilence.

When a plague makes its appearance, every individual thinks it at his door, and feels personally interested in the protection of himself and family. Hence the general excitement and the prompt action. Few persons have a notion that legislation for the preservation of health in the poor and labouring classes is any part of public duty, which seems confined to measures for taking charge of them only when reduced by actual disease to helplessness. As if prevention, whenever it may be accomplished, was not infinitely more advantageous to the cause of humanity as well as to public economy. We entirely concur with Dr. Griscom in the following views: "No duty can engage the attention of the magistracy of a city or state, more dignified in itself, more beneficial to the present generation, or more likely to prove useful to their descendants, than that of procuring and maintaining a sound state of the public health.—As upon the condition of health of an individual are based his physical and mental strength, his ability for self-maintenance, his personal happiness, and that of others dependent on him, and also his usefulness to his family, to the community and his country; and as the community depends for its prosperity upon the performances of its members, individually and collectively, in the measure of influence committed to them respectively, so does the health of the people affect the capacity and interests of the state."

As upon the individual, when sick, falls an increased pecuniary burden, with (in general) a suspension of income, so upon the state or city must rest, not only the expenses of removing an unsound condition of public health, but also, from the attendant loss of character, a diminution of its resources.

When individuals of the pauper class are ill, their entire support, and perchance that of the whole family, fall upon the community. From a low state of general health, whether in an individual or in numbers, proceed diminished energy of body and of mind, and a vitiated moral perception, the frequent precursor of habits and deeds which give employment to the officers of police and the ministers of justice.

Those who have interested themselves in statistical investigations relating to the mortality of cities, find an immense disparity in the proportions reported from different sections or localities, always demonstrating that the deaths, and of course the sickness and physical disability, are by far the greatest in the abodes of the active operatives.

In regard to the necessity of legislation in order to secure the poorer classes from that excess of sickness and mortality which now falls to their hard lot, we long since expressed our opinion, in an article upon the Medical Statistics of Philadelphia, published in this journal (November, 1831). It is highly gratifying to us to find that nearly fifteen years after they were published here, our views have been brought before a commission appointed by the British Parliament for inquiring into the state of large towns and populous districts. The London Medical Times for January, 1845, in an article upon "Public Health," analyzes the report of the commissioners, and thus refers to our investigations and conclusions.

"Our space does not allow us to cite at length the passage which Dr. Arnott extracts from the Medical Statistics of Philadelphia, by Dr. Emerson. Fever, in some of its forms, is almost universal among the inhabitants of the undrained and unimproved outskirts, but of rare occurrence in the central parts, which are well paved and drained; 'by far the greatest proportion of the annual sickness and mortality of ordinary seasons, furnished by the narrow and confined alleys and courts existing in various parts of the town:' 'the difference though sufficiently obvious in adults, most lamentably conspicuous among children;' deaths, from cholera, rare in houses with large and well-aired apartments; the influence of meagre and unwholesome food, and immoderate indulgence in strong liquors, though usually mentioned as the chief causes of the excessive mortality of the labouring class, insignificant when compared to that of breathing air that has been previously expired, and which, moreover, is commonly charged with animal and vegetable effluvia:—these are some of the points touched upon; and they confirm the opinions of all who have inquired into the condition of our large towns.

"Before we dismiss Dr. Emerson, we must quote his opinions on the necessity of legislative interference in behalf of the health and lives of the labouring class. If a citizen of the *soi-disant* land of liberty *par excellence*, can contemplate without a shudder such interference with, what the *laissez faire* school are in the habit of calling, the rights of property, then our consciences may be more at ease when we proceed to take measures to restrain our own landlords. 'The numerous instances,' says Dr. Emerson, 'wherein the mercenary calculations of individuals have tempted them to put up nests of contracted tenements in courts or alleys, admitting but little air, and yet subjected to the full influence of heat, have often induced us to wish that there could be some public regulation by which the evil might be checked. Mankind have inhabited cities long enough to know from severe experience, that there are certain limits to the denseness of population, which, when passed, always lead to disease and mortality. As we think every thing tending to the preservation of public health must be a fit subject for legislation, we do not see why a law should not be procured by which the undue crowding of population might be prevented, and the number and size of dwellings adjusted to superficial limits. There are, at present, municipal regulations intended as a protection against conflagration, by designating the materials of which houses shall be constructed: and if such precautions be deemed so important when property is the consideration, of how much more consequence would be those for the preservation of health and life.'

"So," resumes the London writer, "thought the framers of the new Building Act, which makes provision for the future; and so must think every humane and reasonable man as regards the houses of the poor now in existence. Existing evils must be remedied, as well as future ones guarded against. Our Punderson's Gardens and Lamb's Fields, our Liverpool cellars and courts, must be looked to. The operation of the new Building Act will be too slow to meet such pressing abuses.

"Having quoted the opinions of an American physician in favour of legislative interference between the landlord and the tenant, we will support them by a passage to the same effect from a recently-published work on the mortality of Brussels, by M. Ducpetiaux, of which some account was given in the *British and Foreign Medical Review*, January, 1845:—'People will, perhaps, urge as an objection to our plans (for the improvement of the condition of the houses of the poor,) the necessary interference with the rights of property. But is our respect for the rights of property to be carried so far as to endanger the public health and security? The rights of the proprietor are necessarily limited by the rights of society. That limit is inscribed upon nearly every page of our law. Why does it not also exist for the speculator who lets his houses to the workman and indigent? We impose rigorous conditions on the sale of commodities; we confiscate, without hesitation, meat of bad quality, putrid fish, adulterated liquors, and bread below the legal weight; and we not only confiscate these things, but we punish their owners. By what strange contradiction do the proprietors of these hideous dens, these infectious holes—to inhabit which is at least as dangerous as the use of the most unwholesome food—not only remain unpunished, but continue to enjoy a peculiar protection, and a sort of privilege, inasmuch as they are exempt from the greater part of the conditions imposed upon other proprietors. If we forbid the sale of arsenic, &c., why do we allow a host of wretched beings to perish by slow poison in the unwholesome habitations in which they are necessarily confined?'

"Thus is it that from every side we hear the same complaints of the wretched habitations provided for the poor, and the same representation of the necessity for legislative enactments to correct the present and prevent the future evil. America joins with Europe in the demand that the health and lives of the poor shall no longer be made the sport of avarice or negligence. Take courage, then, ye timid statesmen; rouse yourselves, ye torpid victims of the system of *laissez faire;* put forth your utmost strength, ye working aristocracy of rank and intellect; there is work for you to do, and more honour to be won in doing it than in a thousand victories by sea or land. The pestilence is no unworthy foe, for it destroys every year more than twice as many as fell in the battle of Waterloo. Be it your task to overcome it, and to gain a victory worthy of a Christian nation."

It appears, by the reference to the new "Building Act," that in London something has been already done towards regulating the construction of dwellings in order to promote the health of their occupants.

The objects of Dr. Griscom's communication, briefly stated, are these: 1st, to show that there is an immense amount of sickness, physical disability, and premature mortality, among the poorer classes;—2d, that these are, to a large extent, unnecessary, being in a great degree the results of causes which are removable; 3d, that these physical evils are productive of moral evils of great magnitude and number, and which, if considered only in a pecuniary point of view, should arouse the government and individuals to a consideration of the best means for their relief and prevention; 4th, to suggest the means of alleviating these evils and preventing their recurrence to so great an extent.

Referring to the baneful influences to which a large class of the most active inhabitants of New York, as of other cities are exposed, Dr. Griscom observes, "Our people, especially the more destitute, have been allowed to live out their brief lives in tainted and unwholesome atmospheres, and be subject to the silent and invisible encroachments of destructive agencies from every direction, without one warning voice being raised to point to them their danger, and without an effort to rescue them from their impending fate. Fathers are taken from their children, husbands from their wives, 'ere they have lived out half their days,'—the widows and orphans are thrown upon public or private charity for support, and the money which is expended to save them from starvation, to educate them in the public schools, or, perchance, to maintain them in the workhouse or the prison, if judiciously spent in improving the sanitary arrangements of the city, and instilling into the population a knowledge of the means by which their health might be protected, and their lives prolonged and made happy, would have been not only saved, but returned to the treasury in the increased health of the population, a much better state of public morals, and, by consequence, a more easily governed and respectable community.

"Sanitary regulations affect the pauper class of the population more directly than any other, because they live in situations and circumstances which expose them more to attacks of disease. They are more crowded, they live more in cellars, their apartments are less ventilated, and more exposed to vapours and other emanations, &c.; hence, ventilation, sewerage, and all other sanitary regulations, are more necessary for them, and would produce a greater comparative change in their condition. The influence of drainage upon the health and lives of the population, is too well known to require, at this day, any argument.

"The investigations to which I have briefly alluded, as so necessary and desirable for this city, have been carried on in other countries, with a degree of enthusiasm, sustained by talent and learning, which does honour to Philanthropy. No one can rise from the perusal of the works of Edwin Chadwick, of London, or of Parent Du Chatelet of Paris, or of many others who have laboured in this field of humanity, without feeling a portion of the ardour which inspires them, and wishing he had been thrown into the same pursuit, that some of the leaves of the same laurel might encircle his own brow. It is the cause of Humanity, of the poor, the destitute, the degraded, of the virtuous made vicious by the force of circumstances, which they are now investigating, and exposing to the knowledge of others.

"It is often said that 'one half the world does not know how the other half lives.' The labour of raising the veil which now separates the two halves, by which the misery and degradation of the one, have been concealed from the view of the other, has been theirs and their associates. Howard, called by distinction *the Philanthropist,* revealed to the gaze of the astonished multitude the interior of the prisons of England, and straightway the process of reform commenced in them, and continued until the prison system of the present day has become one of the most striking examples of the spirit of the times. But Chadwick and Du Chatelet, especially the former, are diving still deeper into the subject of moral and physical reform. They are probing to the bottom the foul ulcers upon the body of society, and endeavouring to discover the causes of so much wretchedness and vice, which fill the prisons and work-houses. Howard's labours tended to *cure* the disease, Chadwick's to *prevent* it. These operations constitute a highly important part of the great work of melioration and improvement, in the condition of mankind, now going on, in nearly all civilized countries, and which characterize the present age.

"If not on a par, in importance, with the improvement in education, which has of late made such rapid strides, it certainly is second only to it, and indeed it may well be questioned, whether improvement in the physical condition of the lower stratum of society, is not a necessary precedent, in order that education of the mind may exercise its full and proper influence over the general well-being. Teach them how to live, so as to avoid diseases, and be more comfortable, and then their school education will have a redoubled effect in mending their morals, and rendering them intelligent and happy. But without sound bodies, when surrounded with dirt, foul air, and all manner of filthy associations, it is vain to expect even the child of education to be better than his ignorant companions, if indeed you do not, by educating him, give him an additional weapon, by which he may prey more successfully upon his fellows."

The topics chiefly discussed by Dr. Griscom, in connection with the subject, are the following: Distinction between Public Health and Individual Health. System of Tenantage of the poor. Arrangements of dwellings of the poor. Cellars as residences, and their influences. Ventilation, and amount of air necessary for each person. Number of sick paupers, and greater proportion of females. The Prevalence of Scrofula. Respective influences of food and air. Numbers dying at certain ages. Comparative chances of life in different occupations. Government a party to the degradation of its subjects. Influence of ill health on morals. Dependence of the community on the labour of its members. A new arrangement proposed for a City police, with the proper duties of a Sanitary Police. Fresh air regarded as a preventive of intemperance. Sewerage—Burial places, &c.

We give the following extract from Dr. Griscom's address, as embodying his views in relation to a Sanitary Police, the general benefits of securing proper ventilation, and some of the means proposed for effecting the hygienic objects.

"A sanitary police, composed of such individuals as are herein suggested, would constitute an efficient corps of *Health Missionaries*. Their time would be principally devoted to the purpose of teaching the poor the rules which should regulate their household operations: and the value of fresh air, ventilation, cleanliness, temperance, &c., would form constant themes for them. The circulation of Tracts on Health, distributed with the same freedom as religious tracts now are, by hands equally interested in the comforts and condition of the poor, would form a powerful addition to their means of usefulness. The Dispensary Physician wields, for these purposes, a power possessed by no other class of men.

"To the habits of life of many of the labouring classes, to their confinement in small apartments, and to *their ignorance of the laws of life and health*, by which especially, even their contracted arrangements are unnecessarily kept in a bad condition, we are to look for no inconsiderable amount of the injury which they sustain. The moisture, filth, and confined atmosphere of the courts and alleys, are also prolific sources of disease; in the occupations of many lurks the enemy. But if we restrict our attention to them, we shall overlook a very large proportion of the causes of mortality, and with all our efforts to improve the sanitary condition of our city, we should fail in some of the most essential points. A well-regulated and efficient health police might do much towards correcting the existing evils, but to carry the desired reform to the utmost limit, and with a greater permanency, measures which no police can carry out, are necessary. And as these evils are not confined to the labouring and destitute part of our population, but afflict also the wealthier portion, a more healthy state of public opinion is absolutely necessary, to effect the desired results.

"*This can best, if not only, be done, by making physiology, as applied to the laws of life, and the prevention of diseases, a subject of study in all our private, public and common schools.* The children who attend these, especially the latter, are the individuals by and with whom, the important change of opinion and habit, is to be wrought, if at all. It is needless to say to an ignorant adult, apparently free from sickness, that he lives, works and sleeps, in too confined an atmosphere—he will answer that he is well enough, a change would be irksome, and cost money, and he will not believe what you say, for he cannot be easily made to understand the importance, or even the right use, of air. But bring up his child in a knowledge of the value and necessity of pure fresh air, by teaching him the relations which it bears to the blood, the digestion and other functions—teach him never to fear it, that it is his immediate and incessant source of life and health, give him a knowledge of the diseases and dangers to which its absence will subject him, and think you he would not avoid its impurities as he would poison or the pestilence? In his school-room, his sitting-room, his chamber or his work-shop, he would seek for a pure, clear atmosphere, as when thirsty he would seek the cool water, as the weary 'hart panteth after the water brook.' 'Ventilate, ventilate,' would be his natural demand, in tones of earnestness proportioned to the necessity which his expansive lungs, and ever-freshened feelings would readily discover. The humble tenement of the labourer would then, though but a single room, be no longer shut night and day, unvisited by the refreshing air of heaven; the workshop would then no longer be a close receptacle of foul effluvia of human and other origin, and our churches, public-rooms and lecture halls, be no more unventilated."

Nothing effectual will ever be accomplished in regard to these matters until the subject has been agitated again and again, by individuals alive to its great importance. The startling facts in relation to the blighting influences existing in places where numbers of human beings are brought together within narrow limits, are revealed through the labours of the Statistical investigators. The developments made by these are at first noticed as matters of interest by the general inquirer, and at last seized upon by the philanthropist, who finally brings them under the notice of the legislator. Where individuals have been led forward by a laudable zeal for the cause of humanity, it is truly astonishing how much can be accomplished by their means. We have just received a thick octavo pamphlet containing a report made to the Legislature of Pennsylvania, which shows that the authoress, Miss Dix, has actually visited every one of the fifty-eight counties in the State, and described the condition of the Prisons and Alms Houses in each. Had the Legislature appointed a Commission for such a purpose, it would doubtless have required years of time, and the expenditure of considerable sums of money to have collected the information here presented by a single philanthropic individual, and that individual a lady, actuated by motives of pure benevolence, and subjecting herself to fatigue, exposure and pecuniary expense, for the sole reward of ameliorating the condition of the poor and afflicted who have no means of helping themselves.

G. E.

ART. XV.—*Die Neuesten Entdeckungen in der Materia Medica, für praktische Aerzte geordnet, von* Dr. JOHANN HEINRICH DIERBACH, ausserordentlichem Professor der Medicin zu Heidelberg, mehrerer gelehrten Geseleshaften Mitgliede. Zweiter Band. Heidleberg und Leipzig, 1843.

The latest Discoveries in the Materia Medica, arranged for Practitioners of Medicine, by JOHN HENRY DIERBACH, extraordinary Professor of Medicine at Hiedleberg, member of several learned societies. Second volume, &c.

This is a book of more than 1300 closely-printed octavo pages, professedly restricted to an account of the latest discoveries in Materia Medica, including new medicines, and new modifications and applications of those before used. But to give a just idea of the elaborate character of the work, and the truly German industry exhibited in its production, it should be stated that this is only one of a series of volumes upon the same subject, of which the first appeared five years previously, and a third, which the author only hopes may be the last, is yet to come. Not having seen the first part, we are unable to give an opinion of the entire plan, though the author expressly states that the present volume is in itself a consistent whole.

After an elaborate catalogue of all the very numerous recent treatises, European and American, upon Materia Medica and its several branches, the author enters upon his subject with an account of the newly recommended vegetable remedies, indigenous or cultivated in Germany. These he distributes into the several subdivisions of 1, the Amygdaleæ; 2, the Rosaceæ, Umbelliferæ, Compositæ, &c., distinguished by their diaphoretic or diuretic action; 3, plants of various natural families recommended in the treatment of the cachexia and intermittent fevers; 4, plants recommended in diseases of the organs of sense; and 5, vegetable remedies recommended in hydrophobia, and the bites of poisonous snakes. The reader may possibly discover in this arrangement some principle of connection which has escaped our penetration.

The second grand division is devoted to vegetable remedies of foreign origin, under which head the author, changing his scheme of classification, treats *first* of roots, *secondly* of barks, *thirdly* of stems, leaves, and flowers, *fourthly* of fruits, seeds, and other products, and *fifthly* of sea-weeds capable of forming a jelly.

In the third division the new chemical preparations are noticed, under the several heads of 1, those of animal origin, 2, vegetable principles not alkaline, and 3, organic bases. When on the subject of the vegetable alkalies, the author takes occasion to treat also of the crude medicines which afford them, as of nux vomica under strychnia, and of opium under morphia. To the latter of these drugs he devotes much space, and, in his account of it, does not by any means confine himself to the newly proposed applications of the remedy.

The fourth division includes "recent experience in relation to the operation and medicinal powers of various narcotic plants belonging to the family of the Solaneæ," among which the Hyoscyamus, Belladonna, Stramonium, and Tobacco are especially considered. There seems to be no very obvious reason for departing, in relation to these medicines, from the arrangement which the author adopted in relation to opium. Like that narcotic, they owe their virtues to peculiar organic alkalies, and have an equal claim to a position in the preceding section.

In the fifth division the alkaline salts are brought under notice; in the sixth, iodine and its preparations; in the seventh, metallic substances; and with these the work closes.

If a discoverable principle of association between the several parts of the work is wanting, the deficiency is in great measure supplied by an Index; a most valuable portion of most modern treatises, which enables the author to indulge to the utmost his peculiar notions of classification, or to neglect classification altogether if it so please him, without any very material inconvenience to the learner.

The author has most industriously collected information from a vast number of sources, American as well as European, giving at full length the facts and opinions of the writers whom he cites, and not unfrequently adopting their language. He seems to have aimed less at producing a compact, well-digested and original work, than to collect a great mass of raw material, upon which others may exercise their skill in selecting, shaping, polishing, and arranging. It would be quite impossible to give, in a brief bibliographical notice, an analysis of the contents of a treatise like the present, embracing so great a variety of matter, so loosely connected. We must content ourselves with the brief outline above given, assuring the reader that the book is copiously stored with materials of all grades of value, and that not only those in search of important practical information, but the curious also, and those fond of novelty for its own sake, will find in its pages abundant means of satisfying their several wants.

G. B. W.

ART. XVI.—*Report of the Trial of Abner Rogers, jr., indicted for the murder of Charles Lincoln, jr., late Warden of the Massachusetts State Prison, before the Supreme Judicial Court of Massachusetts, holden at Boston, on Tuesday, January 30th*, 1844. By GEORGE TYLER BIGELOW and GEORGE BEMIS, ESQS., Counsel for the defendant. Boston, Charles C. Little and James Brown, 1844: pp. 286.

THE prominent points of the case reported in this truly valuable work are as follows. Abner Rogers, jr., was a convict, for the second time, in the Massachusetts State Prison. He was employed in the manufacture of matresses, and up to the time of 15th June, 1843, his health had been such as to enable him to continue at work, doing his daily quantity of labour. For several days previous to that date, his conduct had been so singular as to attract the notice of those around him, some of whom believed him to be really labouring under an attack of mental alienation, and others supposing him to be feigning it.

On the afternoon of the 15th of June, Mr. Lincoln, the Warden of the prison, accompanied by another person, entered the shop in which, with others, Rogers was at work, when the latter, seizing a shoe-knife, rushed towards Lincoln, stabbed him in the back and inflicted a deep wound in the side of his neck, such as to produce death.

After a full, apparently fair and equitable trial, the verdict in the case was "NOT GUILTY, BY REASON OF INSANITY."

Although Mr. Lincoln, upon whom the homicidal act was committed, and Dr. Walker, the physician of the prison, both of them men of no inconsiderable experience, concurred in the belief that Rogers was simulating insanity, yet the testimony elicited during the trial is such as to convince every one who has been much conversant with the phenomena of mental diseases, of the righteousness of the verdict. The sequel of the history of the prisoner has proved it to be so. He was removed to the Massachusetts State Lunatic Hospital, at Worcester, where he remained, evidently insane, several months, and finally, during service on the Sabbath, leaped through the window of the chapel, and died in about thirty-six hours from the injuries occasioned by the fall.

The popular notions in regard to insanity are exceedingly crude and erroneous; and, unfortunately, the same remark is but too extensively applicable to the members of both the medical and the legal profession. The laws, too, relative to cases of mental alienation, are everywhere so imperfect as to involve the administrators of justice in a labyrinth of difficulties, and lead to the most singularly inconsistent results in this species of medico-judicial trials. It is unnecessary to search the annals of foreign jurisprudence for incontestable proofs of the following propositions.

1. Persons have been executed for homicidal acts committed under the influence of maniacal delusions and impulses, which should absolve those persons from moral responsibility.

2. Individuals are now suffering imprisonment for the expiation of offences committed at times when those individuals were, by reason of insanity, not amenable to the laws.

3. On the plea of insanity, prisoners indicted for homicide have been acquitted, when, from the evidence given upon trial, no facts were elicited satisfactorily demonstrating that the prisoners, either prior or subsequent to the commission of the felonious acts, were labouring under a degree of mental disorder sufficient to exculpate them from the punishment legally adjudged to his offence.

4. In civil tribunals, in cases *de lunatico inquirendo*, where the person, in the opinion of those who had thoroughly investigated his condition, was evidently insane, either the jury have been unable to agree, or the suit has been withdrawn by the counsel, under the impression that the jury would return a verdict of sanity.

It may truly and most emphatically be asserted that "these things ought not so to be." They indicate an imperfect code of laws; they are expressive of ignorance both popular and professional.

We hail the book before us as one of the correctives which should be productive of a better state of things amongst us. It should be attentively read by every physician, by every lawyer, and by every juror who may be called to sit in judgment upon a prisoner indicted for felony, and in defence of whom is raised the plea of insanity. P. E.

Art. XVII.—*Miscellaneous Contributions to Pathology and Therapeutics; being a Series of Original and Practical Papers on Rickets, Hydrocephalus, Impotence and Sterility, Pulmonary Apoplexy and Hæmoptysis*, &c., &c. By James Richard Smyth, M. D. Homines ad Deos nulla in reproprius accedunt, quam salutem hominibus dando.—Cicero. 8vo. pp. 341. London, 1844.

The title of the present work sets forth, with tolerable fulness, its contents. The only subjects embraced in it, which are not enumerated upon the title page, being Rheumatic pericarditis and pleuritis, and False aneurism.

In respect to each of these affections, the views, whether pathological or therapeutical, advanced by the author, although some of them are by no means novel, and others will require a more extended series of observations to establish their truth, are all of a highly interesting character.

The whole volume will be read by the practitioner with the deepest attention, and although he may not be able to adopt all the views of the author in relation to the character and etiology of the diseases treated of, or to admit as accurate all the directions given for their treatment, he will find far more, we are persuaded, to approve of than to condemn. No one can, indeed, fail to rise from its attentive perusal, without having acquired many hints that will be useful to him at the bedside of the sick.

Rickets, which is the first disease treated of by Dr. Smyth, he considers, in common with a large number of modern pathologists, to be identical with scrofula in its nature and causes, and demanding for its cure a similar plan of treatment.

Its origin and phenomena he attributes chiefly to infantile indigestion—and supposes, that enlargement, in a greater or less degree of the liver, is a prominent feature of its pathology.

Dr. Smyth commences his consideration of this disease with a series of well delineated cases.

Scrofula, of which he considers Rickets to be one of the forms, he refers to a lesion or perversion of assimilation and nutrition in the vascular, muscular or osseous system, dependent upon a defective hæmatosis, in consequence of which the blood is rendered deficient in fibrine and red globules.

Its principal predisposing causes are a hereditary taint and organization.

"When, as sometimes is the case, the disease becomes developed in the system of the child, not the offspring of strumous or otherwise debilitated parents, it is difficult, and, indeed, unnecessary to draw any distinction between the predisposing and exciting causes, as these are, in fact, the same morbific agents, which would appear to differ only as to the times and greater or less intensity of their mischievous actions. When a congenital strumous and rickety diathesis exists, a shorter and less rigorous operation on the infantile system of those causes which ordinarily act as the excitants of the disease, are sufficient to quicken the malady into life and form; and, on the contrary, where such diathesis or physical predisposition does not exist, but when the affection is altogether the offspring of contingent and external circumstances, a longer and more severe operation of these morbific agents is, generally speaking, requisite for the production of the disease."

Dr. Smyth does not consider it necessary that, in order to give birth to offspring predisposed to scrofulous affections, the parents should themselves be of a strumous habit—on the contrary, the predisposition will be found to exist in the children of parents whose constitutions have become debilitated or broken down from any cause. Thus, he remarks—"repeated attacks of gonorrhœa, and long-continued gleets have certainly the effect, in not a few instances, particularly in the male, of greatly depressing the spirits, and of relaxing and softening the solids, and of weakening, in no inconsiderable degree, temporarily or permanently, the entire system and constitution. The offspring of an individual labouring under such debility of the system is very likely, no doubt, to be weak, and disposed to disease, and most of all to the distemper of scrofula in some one of its forms."

The exciting causes of rickets, are, according to our author, referable chiefly or altogether, to the condition and circumstances of the child as regards aliment, air, and exercise, habitation and clothing, and exposure to wet, damp, or cold. "In every case of rickets which has come under my observation," he remarks, "the system of the individual certainly had been, or was being, subjected to the unsalutary agency of insufficient and unwholesome nutriment in the form of breast-milk, or food artificially prepared; its habitation was generally damp, cold, and confined, and excluded, in a greater or less degree, from the due influence of the sun; the nursing and physical education of the child was negligent and bad, it being seldom in the free insolated air, and sometimes but scantily clothed."

All the foregoing remarks are unquestionably correct—they will be borne out, we believe, by the best-established facts in relation to the persons in whom the several forms of scrofula, including rickets, generally occur, and the circumstances under which they are almost invariably developed—but, we can perceive nothing in them particularly novel—our impression is that they are admitted by most modern pathologists, who, however much they may differ as to the exact nature of the morbid condition of the tissues constituting the scrofulous diathesis, are tolerably well agreed as to its predisposing and exciting causes.

As we have already remarked, Dr. Smyth attributes the origin and phenomena of rickets to infantile indigestion connected with enlargement, to a greater or less degree, of the liver. The evidence in support of this view of the pathology of the disease is based chiefly upon the symptoms and progress of four cases, the histories of which are minutely detailed. We should have been pleased had the author entered into a more extended examination of his particular views in this respect—which, to a certain extent, correspond with our own.

"My experience," the author remarks, "I acknowledge, does not enable me to say to what extent enlargement of the liver, and more or less prolonged defect or vitiation of the biliary secretion in children, deranging and impairing the processes of infantile digestion and hæmatosis, may be connected with the proximate cause, and early phenomena of rickets; but I could not avoid observing, during the treatment of the two first cases, in which great enlargement of the liver was present, that the return to a more healthy size of that viscus, and improvement of the general condition of each individual, and marked amendment of the rickety symptoms, were perfectly simultaneous. The great Boerhaave, it is true, has made the proximate cause of rickets to consist in 'a sluggish, cold, and vapid cacochymy, together with a loose structure of the solid parts,' which obviously gives to the affection a humoral origin, and places its *ens primum* in the blood; and in this respect Boerhaave is, no doubt, in a great measure correct. But the blood, it should be borne in mind, is dependent for its existence, and its continuous healthy condition, upon the combined and harmonious operation of a number of organs, the second in office and importance of which is the liver."

"Is it unreasonable to suppose, then, that if this latter organ should become diseased or defective in function, and continue so for any lengthened time during infancy, the period of most tender growth and conformation of the individual, it must affect in some very obvious manner the processes of assimilation and healthy organic formation throughout the entire system?"—"at all events I am firmly of opinion, that the practitioner who will view the infantile affection now under consideration as one simply of hepatic disease, with more or less aggravated derangement of all the digestive functions, and so apply his remedies judiciously in accordance, will be he who is most likely to benefit, and in all respects improve the condition of his patient."

In the following remarks there is much truth, though very loosely and awkwardly expressed.

"From some little attention I have occasionally paid, as opportunity offered, to the indispositions and disorders of children, I will take upon me to observe, that there is a pretty comprehensive class of chronic digestive affections, which these tender young creatures too frequently suffer from, more particularly amongst the poor, the pathology of which is still a subject but imperfectly understood, and the treatment, as a matter of course, uncertain and unsatisfactory. In this class I place the different lesions and perversions of assimilation and nutrition, as exhibited in the respective manifestations of scrofula of the vascular, muscular, and osseous structures. I coincide in opinion, it is necessary to observe, with some authors of creditable authority, who consider the malady of rickets, as regards the softness of the muscles and bones, as nothing else than a scrofulous affection of these parts. I also attribute to a taint of the same distemper the dropsical diseases of hydrocephalus and spina bifida, as I am fully convinced these morbid conditions always originate in this peculiar diathesis of debility."

The author's description of rickets—from its invasion until its termination—is particularly accurate and graphic.

The following is his summary of the pathological anatomy of rickets:

"When the disease proves fatal, the emaciation is general and extreme. The subcutaneous cellular tissue has completely disappeared; the muscles are wasted, flabby, and decolorized; the deformed bones soft, and more cellular than natural, and deficient in their solidifying constituent of phosphate of lime. The deficiency in this distinctive osseous element has been found to amount to one-half the quantity which usually goes to the composition of healthy formed bone. The medullary matter in the cavities of the bones is sanguineous and jelly-like; and the entire substance of the bone is spongy and more vascular than ordinary. The bones of the cranium, besides being softer, are generally larger than natural, and separated at their sutures; and the brain is frequently distended with dropsical effusion. The cerebral mass appears large and inclined to be pulpy. The abdomen is always increased in size, and its parietes wasted and thin. The increase in the bulk of the abdomen is owing chiefly, according to the testimony of Glisson, Hoffman, and others, to greater or less enlargement of the liver.

"The spleen is occasionally found enlarged. The mesenteric glands are sometimes quite sound, and at other times they are observed to be increased in size. The pancreas and kidneys are pretty healthy, and so also are the stomach and intestines, except that these latter are frequently observed to be more distended than natural. The thymus gland is sometimes greatly enlarged. I have seen it, in a boy between eight and ten years of age, the subject of scrofula and rickets, projecting fully three inches above the sternum, and pressing so upon the trachea as to cause severe dyspnœa. The heart and lungs are sometimes found diseased; the former enlarged or hypertrophied, the latter the nidus of tubercular deposit: but such conditions of these viscera are more adventitious and accidental than properly included in the morbid appearances of rickets. The blood is in a dissolved, watery condition, and deficient in all its higher constituents."

The directions for the treatment of rickets given by Dr. Smyth are in the highest degree judicious—we do not perceive in them, however, any thing that would not suggest itself to the well-informed and judicious practitioner. The doctor, it is true, urges attention, in the early stage of the disease, to the morbid condition of the liver, and insists upon a course of treatment directed "to render active the biliary secretion and emulge the liver." But at the period and under the circumstances the treatment referred to is directed—no well-instructed physician would neglect it.

We have entered into a more extended notice of this portion of the volume before us than we might otherwise have been induced to do—in consequence of attention to the views he has advanced on the etiology and pathology of rickets,—being particularly requested by the author in his preface. These unquestionably are sufficiently important and interesting to receive a candid examination, but they certainly can lay but little claim to novelty or originality—and are communicated in a somewhat rambling and awkward style—the ideas and illustrations of the author being thrown together rather than arranged with much attention to clearness and precision.

Of the very interesting essay, or rather series of Essays on Chronic Hydrocephalus, we have only room to notice the remarks of the author on cerebral auscultation as a means of diagnosis, and on the operation of tapping the brain, the period for its employment, and its results.

In his history of the first of the nine cases of chronic hydrocephalus, of which a detail is given in the volume before us, Dr. Smyth remarks:

"The sutures of the upper part of the cranium are all ununited, and the pulsatory movements of the brain can be both seen and felt in the anterior and posterior fontanels, and along the course of the sagittal suture. On applying the ear to any of these situations, and also over the parietal bones, a brief, rather soft, and rushing sound, synchronous with the pulse, is distinctly audible. Over the anterior fontanel and parietal bones it is heard the loudest, and it gradually becomes fainter as the examination recedes over the sagittal suture, posterior fontanel, and occipital bone.

"To be somewhat more particular in the earliest description of this new auscultic phenomenon—it is *an abrupt, brief, rushing, arrested sound, in tone something between a* bruit de soufflet *and a* bruit de rape; *not soft enough for the former, nor hard enough for the latter. In its character of intensity, it varies, of course, with the energy of the action of the heart and pulse. When the circulation is excited and vigorous, and the heart, unembarrassed by palpitation, beats steadily and strongly, the sound is most clear and audible.*"

When the case, from which the above extract is made, was first published—July, 1837,—Dr. Smyth states that he was unaware of the fact that our collaborator, Dr. Fisher, of Boston, had preceded him in the observation of the cerebral phenomenon referred to.

The author relates several cases, in all of which it was present, and readily detected, and one case, having many pathological points similar to those, and perhaps only one point dissimilar, or, it may be, additional, in which the phenomenon *was absent.* This latter was a case of chronic hydrocephalus, in which the operation of tapping the brain had been performed nine times.

In regard to this case Dr. Smyth remarks, that, "on a cursory consideration of the physical symptoms present, which were in fact the symptoms of the last stage of the disease, in connection with the appearances found in the head on dissection, and on comparing these observations with others made at an earlier period of the malady, he confidently expects that further investigation will enable us, by the aid of auscultory signs, to mark the progress of the effusion into the ventricles of the brain, and the concomitant changes in the structure of the organ, in chronic hydrocephalus, with the same degree of accuracy as daily obtains in certain diseases of the chest."

"I allude," he adds, "more particularly to the diseases of hydrothorax and empyema. That, in fact, as in these affections, the respiratory murmur is observed to become feeble, faint, and ultimately extinct, as the serous or purulent effusion continues to increase, and the lung becomes more and more compressed,—so, in like manner, in chronic hydrocephalus, will the cerebral murmur be found to undergo changes indicative of the increase, or the contrary, of the water in the ventricles of the brain, and the consequent compression and absorption of the cerebral substance."

Dr. Smyth notices at some length the contributions of Dr. J. D. Fisher of

Boston, and Dr. S. S. Whitney of Newton, Massachusetts, on cerebral auscultation, published in this Journal. With the general conclusions of the latter gentleman, especially, our author entirely agrees.

Dr. S. has furnished cases of simple congestion, and acute inflammation of the brain, with and without effusion, in addition to those of chronic hydrocephalus already noticed, which present striking examples of the presence, in these affections, of the auscultic phenomenon under consideration.

"In one of these cases, it is worthy of note, that on the establishment of the child's health the sound entirely ceased, thus showing that it is not a physiological phenomenon, but strictly a pathological one; a phenomenon connected with, and resulting from a definite lesion of the brain.

"In cases," he remarks, "of chlorotic cachexia and severe general and cerebral anæmia, the cerebral murmurs or bellows sound is observed to become modified in its character, and to acquire some tones similar to those that are blended with the respiratory murmurs in the inflammatory disease of bronchitis. It acquires musical, cooing, click-like tones. In aneurism of a cerebral artery it puts on a thrilling, purring character."

In illustration of this latter fact, a long extract is given from the paper of Dr. Whitney.

"It is only," observes Dr. Smyth, "according to our present knowledge, in disordered and diseased states of the cerebral vessels and circulation, that a sound becomes developed in the head. Unlike those of the heart and lungs, the functions of a healthy brain are performed in silence, or without the emission of any sound that the ear can catch. On auscultating the head, however, of a healthy child or other more adult individual, four sounds, more or less audible, may be heard, which have originated at other parts of the system. These the brain and cranium have only, of course, conducted to the ear. The sounds are these:—1st. That of the heart. 2d. That of respiration. 3d. That of deglutition, and 4th. That of the voice. These sounds are all easily recognized, and so distinct and obvious as to preclude the necessity for description. They have been denominated—the cephalic sound of the heart—the cephalic sound of respiration—the cephalic sound of deglutition—the cephalic sound of the voice. This last sound, in certain cases of cerebral inflammation, and effusion between the membranes, and on the surface of the brain, has been observed to undergo a change of character similar to that which the voice undergoes in its passage through the lung and wall of the chest in some cases of pleuritis and pleuritic effusion. It acquires an ægophonic tone, which, according to the experience of the American writers, already mentioned, may be considered as a certain diagnostic sign of effusion between the membranes of the brain. Thus, it would appear, that we have a cephalic ægophony expressive of a particular condition of disease of the brain, as we have a thoracic ægophony expressive of a particular condition of disease of the chest."

In regard to the operation of tapping the head in cases of chronic hydrocephalus, we shall give, at some length, the remarks of our author, as it is a question upon which there exists among medical authorities, much discrepancy of opinion, and in relation to which very discordant results have been given as the direct deductions from numerous cases in which the operation is said to have been cautiously and repeatedly performed.

"I am fully aware," Dr. Smyth observes, "of the difference of opinion which generally prevails regarding the results, whether beneficial or otherwise, of tapping the head in these affections; and several of the facts that have been urged on both sides of the question I had an opportunity of witnessing, during the progress of the present case, (the one to which these observations are appended,) to a few of which, with some other points in its pathology, I mean now briefly to advert.

"It is scarcely necessary to state that I am an advocate of the operation, and, on this account, naturally feel the more disposed to draw attention chiefly to those circumstances in the treatment of the case, which must evidently be considered commendatory of the measure. Look at the condition of the child when it first came under my care, and during the early medicinal treatment, and compare this with that which it presented from the third until after the sixth operation. What a happy alteration in all respects did not the state of the little patient exhibit during this latter period! and to what was it attributable? Solely and simply, I think, to the relief afforded to the brain by the removal of the incumbent fluid. Observe the great amendment which had taken place, not only in the cerebral functions, but also throughout the entire extent of the animal and organic systems. The attacks of convulsions had ceased, the stupor and drowsiness had disappeared,—sensibility and voluntary motility had returned,—the senses were resuming their functions,—the development of the mental faculties had actively commenced. The sense of hearing, from having been almost extinct, had become remarkably acute. Vision, also, to some extent had returned, and the expression of the eyes, and the countenance altogether, was considerably improved and more intelligent. The circulation, too, had become more diffused and equable, and the functions of assimilation and of nutrition were more healthily performed. These latter amendments, vital and important as will be granted, were very manifest, in the much less anæmic appearance of the cutaneous circulation in general, and that of the scalp in particular, and by the plumpness and firmness which the body and limbs had acquired, and also by the progressing ossification of the cranial bones."

After the seventh tapping the child was ordered into the country—the water, during its absence from the city, reaccumulated in the head to such an extent as to bring on a return of the convulsions, which, on the removal of the fluid, again subsided, and did not return until a short time previous to the death of the patient.

"I have said," remarks our author, "that I am an advocate of this operation. I shall state my reasons. They are these. I advocate it—first, from the number of cures which it is reported to have produced, and I am satisfied it has done, in the hands of other and more experienced operators. Drs. Conquest, in this country, and Graefe, on the continent, have published some cases in which they seem to have been singularly successful. Secondly, from the very manifest benefit which I observed to result from it in the aggravated, and as was considered, hopeless case, above referred to; and thirdly, from the obvious rationality of the measure, as it would appear to me, when had recourse to at the proper time, and under the combination of lesions which ought, indeed, I conceive, *per se*, to indicate its application."

The circumstances which indicate the proper period for the operation are thus described:

"When the head has become so enlarged that its appearance altogether might bear some resemblance to that of a small balloon, and the coronal and sagittal sutures are from one to two or three inches asunder, and when over these parts the scalp has become so distended and tense, that it has acquired a smooth and shining surface; and further, when the touch here can discover no cerebral movement, but can easily detect the subjacent fluid, and if, as no doubt generally is the case, with this set of physical signs, coma, insensibility, and perhaps, convulsions, be joined, no reliance on general expedients should, in my humble opinion, delay for a moment the employment of the trochar."

"The principal ill consequences, which have been placed to the discredit of the operation, are inflammation of the substance of the brain or its membranes, and cerebral collapse. Of the former, mechanical injury by the trochar has been considered the cause, but the experience derived from the case under consideration would lead me to doubt the entire correctness of this opinion; for, on reference to the dissection, it will be found that the vicinity of the punctures was exempt from all inflammatory results, but that these were located at a different part of the brain, namely, at its base. These facts have induced me to think that, perhaps, in this case, it was not so much the puncturing of the brain as the consequent collapse of the organ which gave rise to its several attacks of inflammation,—and this opinion, it may be allowed, receives more than a little corroboration by my having observed, during the treatment, that the symptoms of cerebral inflammation, and the state of cerebral collapse were always concomitant, that after each operation, although the brain necessarily became more or less collapsed, if that state continued longer than twenty-four hours, it was afterwards accompanied by general febrile excitement and symptoms of cerebral inflammation, and that, on the disappearance of these, the dropsical effusion was again quickly repeated, and the brain rendered distended and tense. Such phenomena I observed not only once, but three or four times; and the mode in which it would occur to me to explain them would be, that under the condition of collapse, the mass and weight of the brain, instead of being supported and pressing, as in the healthy state of the organ is the case, on the sides as well as on the floor of the cavity of the cranium, pressed wholly on this latter part, thereby producing more or less obstruction of the circulation, with some degree of irritation of the interposed membranes, on which the inflammatory attacks supervened; that, during the existence of these attacks, and more especially of the sympathetic febrile excitement owing to, and concomitant with, the *general* arrest of secretion and exhalation which accompany and characterize such a state of the system, the *local* effusion in the present instance was suspended, and the brain, in consequence, remained collapsed. But, as has already been remarked, as these inflammatory and febrile states disappeared, and the processes of exhalation and secretion generally, resumed activity, the dropsical effusion was speedily repeated, and the brain rendered distended and tense. If this explanation be correct, what is the instruction, and what are the practical indications which it contains? Does it not point to the propriety, in performing the operation, of using every precaution to avoid the occurrence of collapse? and that, it appears to me, can only be done by extracting the water slowly and in small quantities. From four to six ounces is the most, I think, that should be drawn off at a time."

The Essays on Impotence and Sterility contain a number of very judicious and sensible observations on the nature, causes, and treatment of these lesions of functions in the genital organs; which we can only briefly notice.

The subject is introduced by some general observations on the neglect of these maladies by pathologists and therapeutists generally. Their connection with nervousness, insanity, and our social instincts and affections, is briefly noticed, and a few cases introduced to illustrate this connection. The relation between the generative organs and the voice is next considered—and then follows the author's examination into the causes and symptoms of Impotence and Sterility.

The mental causes enumerated by Dr. Smyth are mental impulses or emotions—any feeling or passion sufficiently intense to absorb the attention of the mind to the exclusion of the sexual emotion, which accompanies and immediately precedes the act of propagation, will interrupt for a longer or shorter period the functions of the genital organs, and therefore operate as a cause of impotence. This species of impotence is usually of short continuance. When, however, the affection of the mind is of a permanent character, the impotence is liable to be also permanent.

The constant association of sexual disorder, and more or less of generative incapacity, with mental derangement, whether as cause or effect, is pointed out by the author, who believes that every insane individual, whether male or female, is, at the same time, also the subject of some sort of procreative disability, defect or disorder, either impotence or sterility, or both; and the removal of the one affection—most frequently, he apprehends, the mental—would often seem to prove immediately curative of the other. This circumstance is, we believe, not noticed by any leading pathologist, and will not, we believe, be borne out by the observations of those who have more closely studied the condition of the several functions in the insane.

"Fear of incapacity, timidity, excessive modesty, disgust, disappointment, hatred, jealousy, surprise, terror, anxiety, belief in the power of sorcery and witchcraft, will, occasionally, operate so intensely on the feelings and the imagination, as to be the cause of impotence of longer or shorter duration."

In regard to the constitutional causes to which he considers that nine out of ten cases of impotence and sterility are to be referred—admitting, at the same time, that instances do occasionally occur of innate and hereditary generative incapacity in both sexes—Dr. Smyth enumerates, as the most usual, premature, intemperate, and unnatural venereal excitement; disease of various organs of the body, particularly of the cerebellum, liver, stomach, and other digestive organs, and of the circulation generally. The author has seen complete impotence of three months duration, accompanied by general emaciation and impairment of health, excessive irritability of both mind and body, and considerable shrinking of the penis and testicles, occur in a young man of twenty-five from injury of the back part of the head. He also relates a case of sexual incapacity in a male, the result of indigestion and severe chylopoietic derangement, which was effectually cured by the persevering adherence to a plan of treatment adapted to restore the tone and functions of the digestive organs.

The author directs attention to the immediate connection that would appear to exist between the thin and imperfectly formed condition of the seminal fluid, and the excessive irritability of the vesiculæ seminalis and ejaculatory muscles of the urethra and perineum, giving rise to irregular and premature emissions, while the erectile function of the penis is imperfect—generative lesions dependent in many cases upon great constitutional derangement and debility.

He notices, also, the disposition to suicide exhibited by individuals labouring under premature and long-continued sexual incapacity.

The treatment recommended by the author, both hygienic and medicinal, is in general extremely judicious. It is illustrated by a number of cases minutely described—in its leading details it is such as would at once suggest itself to every experienced and well-informed physician.

"The first thing," the doctor remarks, "which reason and experience would dictate to the practitioner to do, is to arrest as soon as possible the seminal emissions. All the other morbid phenomena, both general and local—the debility of the constitution, of the circulation and nervous system, and the absence or imperfection of the generative orgasm, are chiefly the effect of the unhealthy elimination of the seminal secretion from the system."

"Except where there is organic disease of the testicles or of their appendages, such as enlargement of them and of the scrotum from chronic inflammation, sarcocele or hydrocele, causing increased weight and pain, a suspensory bandage should never, according to the author, be had recourse to. Its effect, on healthy testicles, by elevating them from the hanging, swinging position in which nature has, with care and design placed them, is to impair their circulation and dependent vital functions of nutrition and spermatic secretion."

"To brace them up," he adds, "for any length of time in a suspensory bandage, has the effect, as I have seen in more instances than one, of considerably lessening their size, and consequently of injuring the generative powers."

Dr. Smyth's next Essay contains the history of a case of pulmonary apoplexy and hæmoptysis complicated with pneumonia, pulmonary emphysema, and asthma, with an account of the lesions detected after death; accompanied by some remarks upon the pathology and treatment of the case. The case detailed is by no means an unique one—and although the therapeutical observations of the author, in regard particularly to the action of lead, iron, mercury, and iodine upon the blood and organism generally,—as well as those upon the bad effects of blood-letting, in pneumonia, after expectoration has commenced, deserve some attention; nevertheless the space we have already occupied will oblige us to pass them over without comment.

We copy the following from the close of the present essay:

"The pure physiological respiratory murmur, in any work upon auscultation I have had an opportunity of perusing, has not, according to my observation, received an accurate description, one that accords with nature. The murmur is described as being double—inspiratory and expiratory—and similar to that of small bellows. The difference in the *intensity* of these two sounds has been noticed by all writers,—but what I consider rather singular, the difference of *duration*, though to my ear very perceptible, has not been pointed out. The first or inspiratory sound, like the first or systolic sound of the heart, is in duration fully double that of the expiratory or second sound. This observation can at any time be put to the test, by directing attention to the acts of respiration in one's own person. The rhythm of respiration runs thus:—First, there is the period of inspiration, which, I will say, occupies four-twelfths; second, the period of pause or transition, which occupies one-twelfth; third, the period of expiration, which occupies two-twelfths or one-half that of inspiration; and fourth, the period of repose, when the entire respiratory apparatus rests, which occupies five-twelfths, or a little more than that of inspiration.

"It is interesting, and, in a practical point of view, not unimportant to observe how the relative duration of these actions in paroxysms of asthmatic dyspnœa is altered, and sometimes, as may be seen, completely reversed. Inspiration becomes brief and spasmodic, and expiration becomes so prolonged as frequently to include the usual period of repose. What practitioner has not occasionally witnessed, with painful anxiety, the spasmodic inspiratory gasp, succeeded by the prolonged expiratory moaning effort, when the face becomes congested and purple, and the system throughout is affected by transitory asphyxia? In all these cases, the great difficulty, it would seem, which the patient experiences, is in the expulsion of the air from the chest, not in taking of it in; and all the respiratory powers are pressed into action to accomplish this object. Such instances of peculiar asthmatic dyspnœa only occur, I believe, in cases of excessive emphysema, accompanied by more or less of bronchitis, of which, perhaps, the dilated, weakened condition of the air-cells, together with the mucous obstruction of the bronchial tubes, afford a sufficient explanation."

In the succeeding essay we are presented with the history of a case of rheumatic pericarditis and pleuritis, followed by some remarks on the effects of blood-letting in structural disease of the heart. Dr. Smyth notices the difficulty with which syncope is induced by blood-letting or otherwise, where the heart is structurally diseased, in connection with the fact, that fainting, under such circumstances, is at all times a serious and not unfrequently a fatal occurrence.

Some remarks follow on the remedial employment of mercury in rheumatism and syphilis; on the physiological and therapeutic action of iodine, arsenic, iron and mercury, and on the diagnosis of the phenomenon of "friction of ascent and descent."

The concluding essay relates to the circumstances of a singular case of false aneurism of the aorta, the history and post-mortem appearances of which are given. The case is followed by an examination of the question of the possibility of the occurrence of such a disease.

The following extract, though somewhat long, will not, we trust, be altogether uninteresting.

"It has been stated, by writers, that *false aneurism* of the ascending portion of the arch of the aorta does not, nor can ever occur, for this reason, that the structure of the part—the absence of a cellular coat to this part of the vessel—will not permit such a lesion. Dr. Hope, a good authority on this subject, makes the following statement: 'Almost all the aneurisms of the ascending portion of the arch, are originally of the true species; but the false are sometimes engrafted upon them; the tumour generally springs from the anterior or lateral part of the vessel, while the posterior part is little, if at all implicated. It sometimes attains the magnitude of a mature fœtal head, and generally inclines to the right side of the chest. When it springs from the root of the aorta, and the middle and internal coats happen to burst, there results, not a false aneurism surmounting the true, as in other parts, but a fatal extravasation into the pericardium. The reason of this is, that the part of the aorta referred to is destitute of a cellular tissue, and the pericardium, which supplies its place, not being equally distensible, bursts rather than dilates into a false aneurism.'

"The doctrines contained in the two last sentences of this quotation, can no longer be received as authentic. The case given proves the contrary, namely, that *false aneurism* may form at the root of the aorta, as well as at any other part of the arterial system. * * * The serous membrane of the pericardium forms at the root of the aorta a sort of third coat to the vessel, and, in this instance, with the assistance of the adjoining cellular tissue, served every purpose which the more dilatable tissue does elsewhere in the formation of aneurism. In the present case, indeed, the serous membrane *external* to the fibrous coat of the aorta was scarcely more distended than the internal. Again, Dr. Hope says, 'It has been stated by a recent writer, that a preparation in Mr. Hunter's collection subverts the doctrine that false aneurism does not form at the root of this aorta. The preparation of which he speaks, however, scarcely subverts the doctrine, since it is not one of false aneurism; for the middle coat is perfect, the internal one alone being either diseased or removed (which is doubtful) at the base of the sac.' If this preparation in Mr. Hunter's collection do not subvert the doctrine 'that false aneurism does not form at the root of the aorta,' the preparation now in my possession does, than which a fairer specimen of the disease in question could hardly, I presume, be procured from the collection of any of the museums of this city.

"In the supervention of the false aneurism upon the true, the blood, in this case, as far as observation can now detect, seems to have oozed through the walls of the aorta, by several small openings, forming, at first, a sort of extravasation or ecchymosis between the serous membrane of the pericardium and the fibrous coat of the vessel. The extension of the sac to the size which it presented on examination, must have been a process of unusually slow progression. This we can understand from the nature of the serous membrane. The lateral pressure of the blood following each systole of the heart, was prevented from acting with force on the wall of the sac, by the partial intervention of the wall of the aorta, and this useful support was afforded to the sac by the aorta, until the occurrence of the angular rent. But immediately this took place, a gush of blood, propelled by the increased power of an hypertrophied ventricle, escaped into the sac, and caused the rupture and fatal extravasation. The latter rupture followed the former, then, in close succession, and both took place while the boy was on the ladder, fifty-one hours previous to his dissolution.

"Although it is stated by Laennec, Dr. Hope, and other writers on this subject, that life continues longer after extravasation into the pericardium, than after extravasation into any of the other cavities, (for instance, the pleura, trachea, or œsophagus,) into which the blood from aortic aneurism is more commonly effused, I am not aware that there is on record a case, in which the patient survived the extravasation for so long a period as fifty-one hours. Rupture into the pericardium is, indeed, so extremely rare, that the inventor of the stethoscope never saw an instance of it. Dr. Hope has met with one, but he has not mentioned the length of time which the patient survived the event. In the present case, it is to be regretted, that the patient did not remain quietly in bed, as, by so doing, there is little doubt that he would have survived the rupture even longer than he did." D. F. C.

Art. XVIII.—*A Practical Treatise on the Diseases of the Respiratory Organs; including Diseases of the Larynx, Trachea, Lungs, and Pleura.* By Charles J. B. Williams, M. D., F. R. S., &c., &c., with numerous additions and notes. By Meredith Clymer, M. D., &c., &c., with wood-cut illustrations, 8vo. pp. 508. Lea & Blanchard, Philadelphia, 1845.

The materials of Dr. Williams' Treatise, have, in various shapes, been, already, some time before the public; with their character, therefore, the reading portion of the medical profession are perfectly familiar:—we are, nevertheless, pleased with the publication of the treatise in its present form. To the subjects of which it treats the author has unquestionably devoted considerable attention, and he has succeeded in presenting an accurate description of the various forms and characteristics of the more prominent of the diseases implicating the respiratory organs. His account of their physical symptoms and pathological character is particularly full and instructive, while his directions for their treatment evince the judgment of an experienced practitioner, and an acquaintance with the recorded experience of the more authoritative members of the profession. As a manual of the diseases of the larynx, trachea, lungs and pleura, it will be found particularly valuable to the student and young practitioner.

The edition before us has, we are assured, "been carefully revised" from the Lectures of Dr. Williams on the diseases of which it treats, that have just been completed in the London "Medical Times;" while Dr. Clymer has added to almost every section much new and valuable matter, and is to be credited with several new chapters, embracing an account of some important affections, the consideration of which was overlooked by the author.

The principal sources from which the editor has derived the materials of those portions of the treatise which he has added, are, independently of his own experience and observations, the works of Louis, Grisolle, Piorry, Rilliet and Barthez, Valleix, &c. Various synoptical tabular statements are also introduced by Dr. Clymer, modified from the admirable manual of Dr. Walshe, on the physical diagnosis of Diseases of the Lungs.

The labours of the American editor have been well and faithfully performed—and add not a little to the completeness and value of the treatise—the present edition of which we can very earnestly and sincerely recommend to the notice of the profession.

D. F. C.

ART. XIX.—1. *Reports of the Trustees, Steward and Treasurer, and Superintendent of the* [*Maine*] *Insane Hospital*, 1844. Augusta, 1845: pp. 60.

2. *Report of the Pennsylvania Hospital for the Insane, for the year* 1844. By THOMAS S. KIRKBRIDE, M. D., Physician to the Institution. Philadelphia, 1845: pp. 44, 8vo.

3. *Annual Report of the Board of Trustees of the Massachusetts General Hospital, for the year* 1844, (*including the Twenty-Seventh Annual Report of the Physician and Superintendent of the McLean Asylum for the Insane.*) Boston, 1845: pp. 26.

4. *Twelfth Annual Report of the Trustees of the State Lunatic Hospital at Worcester, Mass.* December, 1844. Boston, 1844: pp. 112, 8vo.

5. *Annual Report of the Managers of the* [*New York*] *State Lunatic Asylum.* Made to the Legislature, January 31, 1845. Albany, 1845: pp. 53, 8vo.

THE reports of the several institutions for the insane in the United States, continue to give gratifying evidence of a progressive knowledge of mental disease, and of the management of those who are afflicted with it. Voluminous and interesting, however, as they are, they almost necessarily contain much which must be overlooked in a notice of them; not that the matter is neither useful or entertaining, but because the topics therein discussed have been sufficiently illustrated in the notices which we have given during the past few years. Whenever any thing novel, any new fact in regard to mental disease or new principle of government of the Insane, is developed, we shall endeavour faithfully to record it.

1. The first report upon our list is that of Dr. Ray. It is written in the finished and classic style which characterizes all the productions of its author.

	Males.	Females.	Total.
Patients in the Maine Hospital, Nov. 30, 1843,	45	23	68
" admitted during the year,	43	40	83
Whole number during the year,	88	63	151
Discharged and died during the year,	38	37	75
Remaining at the end of the year,	50	26	76
Of the patients discharged, there were cured	16	16	32
" " " " there died	2	1	3

Dr. Ray, as in the two antecedent years, classifies his patients into "curables" and "incurables." Of the 46 "curables" discharged, 32 had recovered and 2 died; and of the 29 "incurables" discharged, 7 were improved and 1 died.

Several pages of the report are occupied by remarks upon the treatment of Insanity, from the tenour of which it is evident that the author is disposed to give those means which directly influence the *morale* of the patient, a pre-eminence which, in this country, they have heretefore been denied. After alluding to the diversity of treatment pursued during the last half century, he proceeds as follows.

"He would be a bold man who should venture to say that Pinel and Esquirol, whose medical treatment was confined chiefly to baths and simple bitter drinks, were less successful in their cure of mental diseases than those numerous practitioners who have exhausted upon them all the resources of the healing art. The general conclusion to which this fact is calculated to lead us is, that strictly medical means have less to do than some others with the restoration of the insane; and such, I apprehend, is the conclusion to which opinions at the present day are gradually but surely tending. But if insanity depends upon disease of the brain, as is now universally admitted, the question may be pertinently asked, why should it not be equally under the control of medicines, and treated upon the same general principles as other bodily diseases? The reasoning implied in this question involves a fallacy which will be readily detected, by those who do not always associate in their minds the treatment of disease with the administering of drugs; who believe that the healing art has other, and in a large proportion of cases, more potent remedies than the shop of the apothecary can afford. In chronic disorders, especially of a nervous character, the means on which the intelligent practitioner relies with most confidence, are not the heroic medicines whose virtues are blazoned on the pages of countless books, but proper diet and exercise, change of air and scene, useful and agreeable occupation of the mind. If these noble remedies are so efficacious in disorders that do not involve the mind, is it chimerical to expect much from their beneficial influence upon that disorder which mainly affects the material organ of the mind itself? In the treatment of insanity, therefore, it is no departure from the ordinary principles of therapeutics, to give to those means which act directly upon the mind, the preference over such as are applied directly to the corporeal system.

"The soundness of these views is strongly confirmed by the results of observation in regard to particular remedies and modes of practice. General bleeding, which was once considered as indispensable in acute mania, was utterly discarded, forty years ago, by Pinel; is practised with increasing caution and distrust by the English, and is now seldom used in any American hospital. Purgation, stimulation, and other practices equally popular in their day, are gradually sharing the same fate."

Yet Dr. R., so far from entirely discarding medical remedies, acknowledges that "much may be done by their judicious application to prepare the system for the action of more efficient means and influences," and proceeds to detail some of his specific principles of treatment. In cases generally chronic, when the organs of digestion are disordered, "indicated by coated tongue, costiveness, flatulence or morbid appetite," he gives the compound colocynth pill, the regimen of the patient being coarse bread. If the biliary system be affected, he gives the blue pill, and, under its use, has "often" witnessed "a marked improvement in the state of the mind."

"In very recent cases, copious evacuations of the bowels have been sometimes followed by immediate convalescence. In several cases of suicidal propensity, a degree of comparative calmness and desire of life has occurred as soon as the bowels came under the influence of gentle laxatives, and been succeeded by extreme restlessness and suicidal desires when the medicines were withheld for a few days." Yet he would not purge further than to keep the bowels in a free state.

In those recent cases where there is unnatural heat of the scalp and flushing of the face, symptoms which are frequently met by local depletion, preference is given to the application of cold water to the head, as it admits of "unlimited repetition, is less repugnant to the patient, and more efficient in its operation" than cupping. When the functions of the skin are disordered, a condition which, according to Dr. R., is more frequent in insanity "than in other diseases, attended with greater derangement of the general health," "frequent warm bathing, with the plentiful use of soap and brisk rubbing," is recommended. If there be much vascular excitement, the cold bath is to be preferred. Of the use of narcotics to subdue excitement, Dr. R. says: "My own experience leads me to believe, that the value of this method of treatment has been greatly overestimated. At any rate, my results have been very different from theirs who regard this treatment almost in the light of a specific in mania, and that, too, in the more quiet and dejected, as well as its more turbulent forms. For the purpose of subduing inordinate excitement, I have occasionally given digitalis, stramonium, conium and hyoscyamus, but never with any success. The friends of this mode of treatment rely chiefly, it is true, on opium in some form or other, and although it has not proved quite so inert as other narcotics, yet its results in my hands have not been such as to recommend it very strongly to my favour. In no single instance have I witnessed *any* benefit from its use in recent, raving mania, with intense excitement." Of narcotics as remedies for watchfulness he says: "I have sometimes, in urgent cases, allowed myself to try them, but almost invariably with the result of increasing rather than remedying the evil." He then proceeds as follows: "When sleeplessness is attended with much vascular excitement and heat of the head and skin, the cold shower-bath often affords temporary relief, the patient going to bed and enjoying sound and refreshing slumber. Taken at bedtime, it was found in several instances, during the hot summer nights, to procure tranquil and uninterrupted rest, in place of noise and mischievous industry. It sometimes happens, however, that great sleeplessness is experienced by patients who are but little excited, and in whom it is connected with no obvious disorder of other functions. Opium is sometimes serviceable here, but oftener increases than diminishes the evil. Lupulin and hyoscyamus, in the form recommended by Dr. Brigham, superintendent of the New York Lunatic Hospital, (tinct. lupulin, tinct. hyoscy. 4 ozs. each; camphor gum, 1 dr.; ol. valerian, 32 m.,) have afforded relief when other things have failed. For promoting sleep and quiet at night, we have found nothing like hard work in the open air, and when we have been able to use these means, we have seldom been obliged to have recourse to medicines."

The following are the closing remarks upon medical treatment: "Medicines given expressly and directly for their supposed efficacy in curing insanity, without reference to other disorders, I have never administered. Never having regarded insanity as a disease of inflammation, I have not been disposed to treat it by depletion; and, seeing no proof of its resulting from debility alone, I have never, for that reason simply, attempted its cure by stimulants and tonics. But considering it an affection of the brain, with the nature of which we are but imperfectly acquainted, I have thought, that in the present state of our knowledge, the physician's duty consisted in remedying those bodily disorders with which it is generally accompanied. But when these disorders are removed; when the digestive organs have resumed their healthy condition; when the pulse becomes natural or nearly so, and no unusual degree of heat or dryness remains in the skin; when the excessive nervous excitement has disappeared, and the patient becomes tolerably calm and self-possessed, while reason is still very far from having resumed her lost dominion, then we are obliged to rely almost solely on *moral means*."

At the present time, when a diversity of sentiment prevails in regard to corporeal restraints, we should hardly feel justified in not giving the two parties a fair hearing. Hence we extract the remarks of Dr. Ray.

"Within a few years the doctrine has come into vogue in England, that *mechanical restraints* are improper,—and, accordingly, they have been entirely banished from some of its institutions. Of course, this is proclaimed to be a remarkable and valuable reform, and all who would not be considered as laggards in the march of improvement, are imperatively called upon to adopt it. * * * "That a hospital for the insane can be conducted without them, nobody doubts. But the real question at issue is, whether the welfare of the patients is more promoted by the judicious use, or the entire disuse of restraints; and this question is far from being settled by the fact that some hospitals are conducted without them.

"Before we can admit that the interests of the insane require the disuse of all restraints, it must be proved, either that they are positively injurious to the patient, or that their intended object can be better obtained in some other way. I am not satisfied that either of these positions has been established, but it may be well to look for a moment at the merits of the question.

"Of course, it is not contended that the insane should be subjected to no restraint whatever, but that it should be exercised by the hand of an attendant instead of any mechanical contrivance. When, therefore, mechanical restraints are entirely disused, the first consideration that presents itself is, that the number of attendants must be much larger than when they are used even in a very limited degree, and thus the expenses of the establishment be swelled to a very onerous amount.

"In many parts of our country, the only alternative is between a cheap establishment and none at all; and certainly, nothing but the clearest and weightiest reasons should be suffered to have the effect of debarring a large number of the insane from receiving the benefit of hospital treatment. But it is not on this ground I would defend the use of mechanical restraints. In most cases where they are now used in American hospitals, I have no hesitation in saying that they are far preferable to the vigilance or force of attendants. The object is gained more surely, more effectually, and with far less annoyance to the patient. A mechanical contrivance performs its office steadily, uniformly and thoroughly, and is submitted to as something inevitable. The will and strength of an attendant are capricious and variable in their operation. The strong effort is occasionally relaxed, and the idea of eluding his vigilance or overpowering his strength is constantly present to the patient's mind. The former is mere inert matter, and excites no feeling; while an attendant, constantly present, watching and restricting every movement, is viewed as the author or abettor of his sufferings; his spirit is chafed and a state of constant irritation is produced. The propriety of these views will be abundantly confirmed by an examination of some of the cases that require restraint. Take a very common case, specimens of which no hospital is without for any length of time. The patient is covered with sores or abrasions, which he is converting into bad ulcers by scratching off the scabs, or lacerating them with his nails; or he is bent on tearing open a wound in his neck, made by an attempt at suicide. If entrusted to an attendant without any mechanical aid, he must encircle the body and arms of the patient with his own arms, or else by keeping near him, watch the slightest motions of his hands and arrest them in season. The former means would be exceedingly irksome to both parties, and perhaps impracticable; and the latter would fail of its object, which would require a degree of vigilance and quickness of motion that no man can be supposed to possess. On the contrary, let the hands be restrained by a simple leathern strap which confines them to the waist, while they still possess considerable freedom of motion, and thus one end is attained, and the patient may be left to the undisturbed enjoyment of all his other motions. Seeing that he cannot meddle with his sores, he abandons his attempts, and his mind is at rest on that point. Again, a patient is highly excited and restless, and strongly suicidal. If, in order to prevent any harm, an attendant is put in his room at night, the hours are likely to be spent, not in sleep or quiet, but in a series of struggles between the attendant and patient, the latter, in the blindness of his excitement, venting his wrath upon the former, and thereby being made worse rather than better. A simple contrivance, like that just mentioned, would answer the purpose, while the patient would be left to himself in comparative quiet. Another, though exhausted by sickness and needing repose, is constantly endeavouring to rise from his bed, while the conversation and movements of an attendant only excite his attention and maintain the morbid activity of the brain. Let such a person be retained upon the bed by means of the *bed-strap*, an admirable invention of Dr. Wyman, the first superintendent of the McLean Asylum, whereby the patient is gently held upon his bed, though able to turn from side to side—and he ceases to struggle, his mind is comparatively calm, and sleep may visit his eyes. It often happens, that in order to prevent a patient from doing some improper thing, two or three attendants would be required, and they could effect their purpose only by using a degree of force that would exhaust and irritate him. With the muff, or mittens, upon his hands, he could be allowed to control his own movements with perfect safety and far less annoyance to himself. It very often happens, that in the case of the same patient and in the same condition, mechanical restraints are substituted for the personal efforts of an attendant, and the superiority of the former abundantly shown by the superior calmness and comfort of the patient while under their application.

"It is objected to mechanical restraints that they leave disagreeable impressions on the mind of the patient, who regards them, even after recovery, as marks of degradation and unkindness. That such feelings may have been observed in patients whose recovery was quite imperfect, and who consequently regarded restraints, as they might a thousand other things, in a very false light, is very probable, but not a single instance of such feeling has come to my knowledge, in patients who had attained healthy views on every other subject. It is also objected to them that they are liable to be abused; and that they are often applied to save trouble, and even to gratify the spite of attendants. If the application of restraints is to be left entirely to the discretion of attendants, then the result implied in the above objection would, no doubt, frequently happen. But in this institution—and I presume it is so in all others in this country—no restraint can be applied except by order of an officer. It is our rule to use no more, and continue it no longer, than is necessary to effect the object in view, and in all cases, it is the comfort of the patient, not the attendant, which is consulted. In well-regulated establishments, the number under restraint is always very small. While writing this there is not a single patient in this institution, with any kind of restraint upon the person; and this is often the case for many days together. Occasionally, the number under restraint may amount to four or five, but probably the number would not average more than two or three. It is also objected to them that they chafe the skin and produce sores. This, no doubt, occasionally happens, but if the restraint is discontinued as soon as it is observed, the evil is not a very serious one.

"Such are the objections that have been made to the use of mechanical restraints. Whether I have disposed of them satisfactorily or not, I have no hesitation in saying that they may be urged with far more propriety against the substitute that is proposed, besides some others peculiar to the latter. An attendant can seldom control the movements of the patient so effectually and gently as a mechanical contrivance. He is very apt, unintentionally, to use more or less force than the occasion requires. The struggles of the patient must be overcome by the superior power of the attendant, and under such circumstances, it is impossible, in the nature of the case, that he should always keep within the proper limits. But the patient makes no allowance on this score. It is sufficient for him that force has been used at all, to believe that he has been hardly dealt with. In his mind force is synonymous with abuse, and it often happens that patients who recover their reason in all other respects, never see this matter in its true light. For this reason alone, were there no other, I should adopt the conclusion, that when the nature of the case requires a continuous restraint, the preference is always to be given to some mechanical contrivance. It must be recollected, too, that the mind of the wretched lunatic who would be likely to need restraint, is filled with all manner of suspicion and distrust. He believes that his path is beset with snares, and that enemies encompass him around. What can be more annoying and irritating to such a person than the constant presence of one or two strangers at his side, watching every look and constantly interfering with his movements? What restorative process can be commenced, while every arrangement made for his safety tends to cherish and confirm the delusions that have taken possession of his mind? In the early stages of the disease, when there is much excitement, nothing so effectually prevents the patient from sleeping, as the presence of an attendant. It often happens that one who has not closed his eyes for many nights and days, is enabled to get refreshing slumbers the first night after he comes into the house, by being left alone in his room, and, if necessary, subjected to some mechanical restraint. Again—they who object to mechanical contrivances, on the ground of their liability to abuse, seem not to be aware that the substitute they offer is open to the same objection. That man must be either singularly ignorant of human nature, or culpably remiss in the discharge of his duties, who, after having had charge of an institution for the insane, can say that no attendant of his ever used a harsh word, or handled a patient less gently than he might. Attendants are but men and women, subject to the common infirmities of human nature, and for whatever patience, kindness, long-suffering they may exhibit, they must necessarily be indebted more to nature than to the chastening and elevating discipline of life. When we consider how arduous and trying is their duty when placed as a restraint upon a patient who is constantly endeavouring to elude their vigilance, to annoy them with abusive language, and render them uncomfortable in every way, is it strange that they should sometimes lose their temper, irritate their charge by returning a harsh answer to his abuse, and even endeavour to subject him by exercising an unwarrantable degree of force? He or she must be happily endowed by nature, or admirably disciplined by education, who could endure such a trial hour after hour, days and weeks together, and never lose their calmness and self control. Without meaning the slightest disparagement to this class of persons generally, and certainly not to those now employed in this institution, whose uniform fidelity to their trust is entitled to my warmest thanks, it is to be feared that the number of such is small."

2. By the report of Dr. Kirkbride—like all his reports, sensible and practical, and therefore interesting—it appears that, at the commencement of the last year, the number of patients at the Pennsylvania Hospital for the Insane was 132

Admitted during the year - - - - - - -	153
Whole number - - - - - - - -	285
Discharged and died - - - - - - - -	134
Remaining Dec. 31st, 1844 - - - - - - -	151
Of those discharged, there were cured - - - - -	75
Died, Males 10, Females 2 - - - - - - - -	12

Causes of Death.—Inflammation from concussion of the brain, 1; chronic meningitis, 3; dysentery, 2; acute gastro-enteritis, 1; latent pneumonia, 1; intestinal hemorrhage, 1; epilepsy, 1; suicide, 1; exhaustion of old age, 1.

	Males.	Females.	Total.
Whole No., of admissions since the opening of the Hospital	346	246	592
" " discharged, cured - - - - -	141	92	233
" " died - - - - - - - -	34	16	50
" " single - - - - - - - -	204	106	310
" " married - - - - - - - -	120	98	218
" " widowed - - - - - - -	22	42	64

The insanity of ten of the patients is attributed to "fright." Of these, "four were distinctly traced to the riots which occurred during the last year in the districts adjoining the city of Philadelphia." Four cases were "unquestionably produced by the delusion of 'Millerism.'"

Of the whole number of patients, 68 first became insane under 20 years of age, 256 between 20 and 30 years, 124 between 30 and 40, 30 between 50 and 60, 7 between 60 and 65, and 2 between 70 and 75 years.

The following remarks, giving a correct view of the subject of manual labour in asylums for the insane, are both judicious and seasonable.

"From all the varieties of labour, already referred to, some small pecuniary advantage undoubtedly results; but this is as nothing in comparison to the beneficial effects produced on the health of the patients. The true profit of labour about an insane hospital,—and it is a profit that cannot be estimated in money,—consists in the tranquillity and repose that are given to irritable and excited minds, the removal of painful thought, the comfort of a quiet evening after a day's toil, the sound and refreshing sleep, the blessings of a good digestion, and all the happy results which follow these advantages."

Among the various means for dispelling the "monotony of hospital life," Dr. K. mentions the following, which, so far as we recollect, are novelties.

"I have been much gratified," says he, "by observing the pleasant change that has been produced, by having the patients of certain wards regularly collected in the parlours, on those evenings not devoted to other objects, and having the supervisors of the respective wings to spend an hour in reading from works likely to interest their auditors. The effect has been to make an hour, that formerly was to many particularly dreary, one of the most pleasant in the whole day. In the lodges, and in other wards, some of the attendants spend considerable time in reading to the patients under their care and the result has been so satisfactory, that its regular performance will probably soon be made a part of the daily duties in certain divisions of the house.

"Throughout the past and present winter, we have frequently used, during the evenings, for the same object, a very fine magic lanthorn. The great variety of subjects which may be presented with a full assortment of well-executed slides, makes it a very satisfactory mode of combining instruction with amusement."

We have for many years been convinced that great utility may be derived from lectures—particularly upon subjects susceptible of visible illustration—before such patients as have the power of self-control; and, accordingly, in the winters of 1840–41 and '41–'42, we delivered courses upon several subjects in Natural Philosophy, at an asylum with which we were at that time connected. They answered the most sanguine expectations. From the extract given below, it appears that Dr. Kirkbride is about to establish a course of instruction by this method.

"I have recently made arrangements for a short series of valuable and interesting lectures by an enthusiastic naturalist, upon subjects partly demonstrative and otherwise likely to engage the attention and excite the interest of our patients. Of the entire success of the experiment hardly a doubt can be entertained; and before another winter, I hope to be enabled to announce that one lecture of the kind, will be delivered each week, during the season."

For the reasons alluded to in the notice of the preceding report, we extract the remarks of Dr. Kirkbride upon mechanical restraints.

"*Restraint.*—The subject of restraint in the treatment of insanity, is really of so much importance, that no apology is required for its frequent or full discussion.

"The gross abuse of restraining apparatus which is now universally acknowledged to have existed in most of the institutions for the insane in Europe, has produced a reaction, which bids fair to place some of the same establishments in the very first rank of those, one of the distinguishing features of which, is the general absence of restraint. . . . .

"Although it is well understood, that in the hospitals of the United States, with perhaps a few exceptions, these means have been resorted to, to a much smaller extent, it will scarcely be denied, at this day, that until within a few years, much more was employed than was either proper or justifiable.

"From information collected from nearly all the regularly organized institutions for the insane in this country, I have no doubt but that less real restraint is employed in them, at this time, than in the same number of similar establishments in any part of the world.

"In this country, cruelty, immoderate restraint, and ingenious but barbarous contrivances to control the insane, are rarely, if ever, found in properly organized hospitals. When they do exist, it is in the almshouses, and jails, and in the private dwellings of the inhabitants.

"The disuse of restraint or the non-restraint system, as it has been called, means the disuse of mechanical restraint, for which, of course, other less objectionable forms must be substituted. A properly constructed building, an efficient organization,—a more numerous body of more active and intelligent attendants,—all the means to prevent excitement,—all the power which sympathizing kindness and tact can bring to control it when produced, and temporary seclusion, when other means fail, are only a part of the varied modes by which mechanical means of restraint are rendered unnecessary.

"Few intelligent men, familiar with insanity, could now be found to assert that restraining apparatus was frequently required, or that many patients could be benefited by its use. The question in controversy appears to be, whether its use is ever justifiable under any circumstances, or whether it can ever be employed, without injury to the patient.

"Believing firmly that the improper use of restraining apparatus, combined with long-continued seclusion, has been and ever will be productive of the worst effects, and go far to render intractable, curable cases of disease, I am still of opinion, that a few of the simpler forms of mechanical means may occasionally be employed with advantage to a patient. Judging from my own experience, the per centage in any hospital for whom these means are indicated, is exceedingly small, and for considerable intervals none will be required. The rule should be that no apparatus was in use,—its employment should be the exception,—while at the same time it should be understood, that long periods of seclusion were not to take its place, as the effects of the latter might be still more injurious.

"There is one advantage resulting from the nearly entire disuse of restraining apparatus that should never be overlooked,—it brings into activity a constant supervision,—a genuine watchfulness, develops the capabilities of the attendants,—shows the great power of kindness and firmness, and brings out a species of tact, which would have been dormant had mechanical means and seclusion been resorted to, to overcome violence, remove excitement, or cure bad habits.

"Although it is probable cases do exist, I have never yet seen a patient that required any other form of apparatus than the very valuable and comfortable one referred to in previous reports, for retaining a patient on his bed at night, mittens or wrist-bands, with a belt around the waist, or still simpler substitutes for the mittens.

"After a careful review of the 592 cases, which have been under care since the opening of this hospital, I have no hesitation in saying, that all might have been treated without the use of any mechanical means of restraint, had we started with such a determination, or had I felt any pride in making such a declaration. I feel equally confident, however, that in the few cases in which the mild means already referred to, have been employed, the effect in some has been to prolong if not preserve life,—in others, to diminish serious danger, and to shorten extreme violence, and in scarce a single one, to have been productive of the slightest injury of any kind.

"In this hospital the restraining apparatus is kept in the office of the physician, and, like medicine, is never prescribed, unless there is believed to be a decided indication for its use. It is never applied but by the express direction of the physician, and when applied, never kept on longer than he believes it likely to obviate a great danger, or to promote the comfort and benefit of the patient.

"The practical operation of the views above given, is shown in the following statement. In the year 1844 there have been 285 patients under care, and the average number in the hospital has been 151. These have embraced nearly every variety of insanity, and the usual proportion of violent and otherwise dangerous patients, several of whom were brought to us strongly ironed, and still others had been thought to require similar means of restraint before coming to the institution.

"Of these 285 patients, five males and four females have been retained on their beds at night by means of the apparatus already referred to,—one male and three females have had on the connected sleeves, and one male has had a common buckskin mitten attached to an undercoat sleeve.

"The bed apparatus was never used for more than a few consecutive nights, on any patient, and on some for only a single one. In every instance it was applied to break up the habit of standing during entire nights, and to prevent the exhaustion which a determined refusal to assume a recumbent position seemed likely to induce, and these objects were attained in a great measure in every instance. The connected sleeves are large enough to allow ample motion of the arms on each other, and make no pressure on any part; they were used in one instance to prevent an uncontrollable inclination to rub an abraded surface, and in the other cases, to control peculiarly disagreeable habits. The buckskin mittens can hardly be called restraint: they were sufficient, however, to prevent certain injuries to his dress, to which a patient was very determinedly addicted. In no single case have the means referred to been employed on account of violence or suicidal propensities. Besides these, not a strap or any thing of the kind has been upon the person of a single patient. The amount of seclusion, I may add, has been very small and always of short duration.

"From these observations, it will be observed, that in this institution, the use of even the mildest mechanical means of restraint has been little more than nominal, and that in the past year it has been in our power, without difficulty, to have done all that any 'non-restraining' institution has professed to do; as well as that we have been prevented from making such a report, only by a well-settled conviction that by so doing, we should have failed to render all the service to our patients, which our adopted course enabled us to do."

3. The elaborate and very valuable report by Dr. Bell for the year 1843, from which copious extracts were made in a former number of this journal, seems to have precluded the necessity of a long document of the kind for 1844. None will regret the brevity of the last report more than the professional brethren of its author.

	Males.	Females.	Total.
Patients in the McLean Asylum, Dec. 31st, 1843 -	76	58	134
" admitted during the year - - -	65	93	158
	141	151	292
" discharged and died - - -	66	74	140
" remaining Dec. 31st, 1844 - - -	75	77	152
Of those discharged there were recovered - -			68
Died - - - - - - -			19

Causes of Death.—Old age, 10; paralysis and epilepsy, 1; phthisis pulmonalis, 3; debility or exhaustion, 4; suicide, 1; cerebral disease, 1.

The number of patients in the Asylum has been greater than in any preceding year, and, for the first time during the existence of the institution, applicants for admission have been refused, for the want of room.

In the annals of medicine there is probably no broader contrast to be found than that between the prevalent opinions of the management of the insane some thirty years since, and the sentiments expressed in the subjoined extract —sentiments which will receive the concurrence of all who are now connected with institutions for persons afflicted with mental disorder.

"It is confidently believed, that in an institution fully provided with attendants, there may be afforded to all, except a few highly excited or mischievous inmates, every comfort and every luxury to which they may have been accustomed at home."

These remarks are immediately succeeded by the following:—"It has also been an object constantly kept in view, to reduce the restraints upon the volition and the feelings, as well as the actual personal restraints, to the lowest degree compatible with the patient's welfare. We have, as intimated in former reports, no ultra or exclusive views as to the entire disuse of apparatus to abridge the muscular movements of the highly excited. During the last three-quarters of the year, (a memorandum having been kept enables me to state the fact,) it has been proper to use, on the male side of the house, a single restraining measure, that of the muff to the hands of a patient disposed to destroy his eyes; and some form of restraint, in a few instances, on the other side of the house, for reasons deemed imperative. That 'restraints' in these few cases might have been avoided by the substitution of hands, is probable, but it is difficult to appreciate the advantage of such painful, irritating and less secure substitutes, as an universal rule. No reason is yet seen for cutting an institution off from the proper employment of measures occasionally valuable, by a dogmatic adherence to any ultra or exclusive rules, such as may, in other countries, have become popular, if not expedient, in consequence of an honestly generated popular prejudice against 'restraints.'

"In all cases, except a few of the kind above referred to, the ability of an institution safely to dispense with restraints of all kinds will depend principally upon its means of employing and educating an adequate number of good attendants.

"Our reliance has been mainly upon the aid of as many assistants as could be well employed. Feeling always that we had a *carte blanche* from your board to employ any needed aid of this sort, our intention is, that the substitution of mechanical for human guarding, shall be a rare exception to the general rule."

4. The report of Dr. Woodward contains, as usual, a large amount of valuable matter.

	Men.	Women.	Total.
Patients in Mass. State Hospital Dec. 1st, 1843,	135	120	255
" admitted during the year	109	127	236
Whole number during the year	244	247	491
Discharged during the year	117	111	228
Remaining November 30th, 1844	128	135	263
Of those discharged there were cured	56	68	124
" " " died	9	6	15
Whole number of patients admitted in 12 years	1026	987	2013
" " discharged cured	437	479	916
" " died	84	67	151

Single, 1029; married, 789; widowers, 61; widows, 134.

Causes of Death.—Marasmus, 34; epilepsy, 15; apoplexy and palsy, 15; consumption, 14; suicide, 10; disease of the heart, 10; inflammation of the brain, 6; hemorrhage, 5; cholera morbus, 4; inflammation of the bowels, 4; lung fever, 4; mortification of the limbs, 3; dropsy, 3; diarrhœa, 3; disease of brain from intemperance, 2; dysenteric fever, 2; bronchitis, 2; typhus fever, 3; chronic dysentery, 3; erysipelas, 3; old age, 1; gastric fever, 1; land scurvy, 1; congestive fever, 1; concussion of the brain, 1; disease of the bladder, 1. Total, 151.

Dr. W. has observed 789 paroxysms in periodical cases, in relation to the phases of the moon at the time when they commenced. Of these, 372 occurred at the new and the full moon, and 417 at the quadratures. Of the 151 deaths which have taken place at the hospital, 74 were at the time of the new and the full moon, and 77 at the quadratures. Dr. W. says he has never adopted any theory in regard to lunar influence upon insanity.

We extract from the report most of the remarks upon insane children, because the subject is one which has hitherto attracted but little attention. During the last six months we have had under treatment a boy six and a half years old, to whom the description in the first part of the quotation is very applicable. He is improving, and his speech gradually returning.

"There is another class of unfortunate individuals, far more numerous than I had formerly supposed, and much more interesting than idiots,—I refer to INSANE CHILDREN.

"Since I have been connected with this hospital, I have been consulted in a number of cases of this description. These little patients have intelligent faces, well-formed bodies, good developments of the head, and active minds. Their movements are free, easy and graceful; many of them are sprightly, even handsome; they are generally restless, irritable and extremely mischievous, and are rarely able to speak. In some cases, as soon as there is any mental development, the peculiar characteristics begin to appear, without any known cause. In other cases, epileptic fits have preceded these peculiarities. In one case the use of instruments in labour was supposed to be the cause; epileptic convulsions probably sometimes arise from difficult parturition.

"No person familiar with these cases would be likely to mistake them for idiots; they look differently, walk differently, and have different developments of body and mind. Some of these children have been benefited by medical treatment. One, at the present time under my care for epilepsy, seems to be improving favourably. My attention has recently been particularly directed to this subject, as I have been, within a few days, consulted in three different cases, of which the epileptic child, above named, was one. I have strong hope that some of them may be cured, and then instructed. Like other insane persons, there is difficulty in fixing their attention; they move with great rapidity from one thing to another, and are impatient of restraint.

"In some such persons particular faculties seem much more active than others. One lad, in whose case I was consulted, was not able to articulate, and, of course, had never learned to read, but was observing of many things, particularly of mechanical operations, drawings, &c. He has left many traces of his skill on the buildings and fences of his former residence, which are yet to be seen. He has now arrived at manhood, but I have no knowledge of his present condition, or of his progress in improvement for the last few years. When a lad, he was extremely mischievous, but sprightly and interesting.

"Within a few days I have seen a very interesting case of this description: a girl, twelve years old, who has a well-formed head, an intelligent and handsome face, a bright black eye, and easy and graceful manners. She is respectful and obdient in her conduct, gentle and affectionate in her temper and disposition, and usually quiet and unobtrusive, but is easily excited, impatient when urged to do any thing disagreeable to her, and if opposed utters a scream, but cannot articulate. She constantly hurries from one thing to another, and, like the insane, wants a safety-valve to let off her excitement. She is excessively fond of music, would listen with apparent delight to the tones of a piano, seemed to have an irresistible desire to perform herself, and would strike the keys with eagerness and great satisfaction. In her visit to me she would seize the bellows which hung in the room, and blow them with great effort and apparent delight. She is perpetually active, but is far less mischievous than formerly. She has very little power of attention, and has, as yet, never been taught. I have referred the case to my friend, Dr. Howe, whose great success in a case apparently far more forbidding, is universally known, and I am happy to say he is interested in it, and, I have no doubt, will find his active benevolence excited when he shall see her.

"A child, two years old, was lately brought to me at the request of the family physician, who had consulted me respecting it. It is unable to sit, to use its limbs, or talk; its face is intelligent, by no means idiotic. It has powers of mimicry unequaled by any child of its age I have ever met with. Having understood that it would imitate its father in whatever motions he made, I tried some experiments with it, and was astonished and amused to find it copy my movements so exactly, and that, too, with the most roguish expression conceivable, apparently much delighted.

"I have now the case formerly alluded to under my care for epilepsy, which, for some months, has been severe and of frequent recurrence. This child has an intelligent face, and a good development of the head, except that it is small. Its form is graceful, and its movements easy and natural. Since it commenced the use of remedies, it has been more quiet and tranquil, less mischievous, sleeps better, has fewer fits, and they are less severe. If the epilepsy can be cured in this case, and I think it may be, I shall have great confidence that, under the care of its excellent mother, it may be taught to articulate, and, finally, be educated. Indeed, since I have seen this interesting child, some effort has been made to teach it to talk, and with some little success.

"What has struck me as particularly worthy of remark in all these cases is, that while some of the faculties of the mind are active, and many of them capable of improvement, others are torpid or perverted, bearing, in this particular, much resemblance to certain cases of insanity. I have been consulted, quite recently, in a case of insanity which commenced in infancy, and has continued in some degree to this time, now twenty years. When an infant, this young man had epileptic fits; these did not continue long, and the child was apparently healthy, sprightly and intelligent, till eight years of age or upward, and learnt as well as other children. He then became affected with *false vision, saw spiders* and *other vermin* crawling over him and all about him, and particularly in his food, so that it was with difficulty that he could be prevailed on to eat. This delusion continued for some time. At that time, now ten or twelve years, I was consulted in the case, and prescribed some remedies. The delusion left him after a while, and he has since been in most respects better; is able to work, but not to learn much, although his mind seems not to be particularly inactive. He is talkative and inquisitive in an unusual degree, asks childish questions, but is inattentive to the answers, and not profited by the information which he obtains. He is able to read and write some, but has not been able to acquire much knowledge. The present winter he has attempted to acquire some additional learning; commenced going to school, and gave his attention to arithmetic; he made but little progress, and soon began to complain of his head and confusion of thought, finally ceased to speak, because he says he could not speak right. For five or six weeks he has been almost constantly mute, speaking only occasionally. Since that time he has twice run away from his home, and wandered he knew not where, was lost and confused in his mind. When he returned home the first time, he was greatly rejoiced to see his friends, and to get back again. When found the second time, he was brought to me, to be placed under my care: his vision is not now disturbed; he does not talk, because he is not satisfied with what he says, and he is tired of life. A few days since he purchased a pistol, to take his own life, but it was taken from him before he made any attempts. He is a stout, hale, full-grown young man; his head is of good size and well formed, his motions easy and graceful, his speech natural. He eats rather sparingly, is anxious to get well, and willing to adopt any means recommended for his cure."

In this report Dr. W. has entered into the details of his system of medical treatment, thus giving to the members of his profession, *as well as to the public*, the results of his extensive experience. Before proceeding to embody, by extracts and condensation, the most valuable part of this section, we must be permitted to remark, discarding at the same time all desire of dictation, that it is with sincere regret that we are compelled to turn aside from journals purely professional, and seek in reports to legislative assemblies some of the most valuable of our therapeutical knowledge.

Bleeding.—"All agree" that depletion by general bleeding and active catharsis is not favourable in insanity, and is often decidedly injurious. If bleeding procure relief, it is but temporary, and the excitement generally returns with greater violence and under more unfavourable circumstances than before. *The indications for active depletion are the effect and not the cause of excitement.* These remedies reduce the energy of the system and increase the irritability of the nervous system. Free general bleeding is only useful in cases of entonic inflammation, such as pneumonia and phrenitis.

Cupping and leeching.—Local bleeding, though more favourable than general, can rarely be relied on to cure insanity, and is resorted to for temporary advantage, reducing excitement until other remedies can be brought to exert their influence. If there be symptoms of determination to the head, cupping may be resorted to, while other means are used to restore the equilibrium of the circulation. In some cases of maniacal excitement, a state of dementia immediately follows excessive venesection.

"*Cathartics.*—Drastic purging is often even worse than bleeding. The effect of this remedy, as a depletion, is probably less disastrous than blood-letting, but it produces other effects often very injurious. The digestive organs of the insane are peculiarly liable to disturbances. Dyspepsia, vomiting and costiveness or diarrhœa, are often troublesome symptoms with them. Drastic cathartics generally aggravate these symptoms when they exist, and sometimes produce them when they do not. Costiveness is generally easily obviated by mild cathartics; it is far less troublesome than diarrhœa, which is often obstinate, and too frequently a dangerous symptom when attendant on insanity. If the secretions of the liver are unhealthy or deficient, or if other conditions of the digestive organs require a change, the blue pill or small doses of calomel may be indicated. These remedies often produce very favourable impressions, and prepare the system for others which may be needed to remove the symptoms of insanity itself.

"In short, cathartics, as such, rarely do good in cases of insanity, but alterative remedies and laxatives are often necessary, and in many cases cannot be dispensed with. Tincture of rhubarb and senna, with aromatics, aloetics, colocynth, and guaiacum, are valuable remedies of this class.

"I often combine compound extract of colocynth with ens veneris, or martial flowers, in torpid states of the intestinal canal with constipation. My favourite remedy in such cases, is the tincture or powder of guaiacum. No remedy in my hands has a more favourable effect in those cases of melancholy attended by dyspepsia, costiveness and gastric distress after taking food, than the aromatic tincture of guaiacum prescribed so as to insure a laxative effect. It invigorates the stomach, acts favourably upon the bowels, proves diaphoretic, and, when necessary, emmenagogue. It may be prescribed in doses of from one drachm three or four times a day, to half an ounce. Milk and sugar are altogether the best medium in which it can be taken. The powder of guaiacum is the better form of this remedy, if needed as a simple laxative; it rarely nauseates, and is useful in flatulency, giving tone to the whole alimentary canal, and effectively obviating constipation.

"Oil of Croton in combination, given in minute doses, often proves favourable to remove costiveness. It is almost the only active purgative which can be prescribed favourably in small quantities. In combination with tonics, alteratives and narcotics, it can be used without swelling the bulk of the medicine, often in very small doses counteracting the constipating effects of other remedies.

"*Emetics.*—Emetics have never been extensively used in my practice with the insane. Many practitioners think well of their effects, and I have occasionally prescribed them to obviate particular symptoms, but have not seen much good from them to relieve the symptoms of insanity. In certain conditions of the stomach, they are indicated in this, as well as other diseases. Ipecacuanha and sulphate of zinc and copper are generally preferable to antimony. Antimony in small doses, combined with narcotics to determine to the surface and obviate their constipating effects, may be prescribed for a short time in the commencement of the disease, but is not useful when it has progressed for some time, especially when tonics and generous diet become necessary.

"*Narcotics.*—By far the most useful remedies in active mania, after the system is prepared for their use, are narcotics.

"It is generally conceded at the present day, that the condition of the brain in mania, is not inflammation, but rather a high state of irritation, increasing its activity and that of the nervous system generally. The symptoms are sometimes equivocal, and are calculated to mislead; but close observation and the effect of remedies conspire to show that the brain is not in a state of inflammation. For this state of the brain narcotics would seem to be the most natural remedies, and experience shows that such is the fact. In many cases, this state of excitement will, after a time, give place to more healthy and natural actions, and the disease will be cured without the use of remedies; but in a majority of cases the symptoms yield more readily and favourably where narcotics are prescribed.

"*Morphine.*—The remedies of this class most extensively useful, are the sulphate of morphine and other similar preparations. The exact time, circumstances, and cases when these remedies can be applied with the greatest benefit, must depend upon the judgment and experience of the medical adviser. On this, doubtless, depends their greater utility in the hands of some men than of others, though many more cases, suitable for their use, may have fallen under the care of one man than of others who have management of institutions. Other practitioners have generally but a limited experience with them, as insanity, at the present day, is but little treated by medicine, except in the institutions especially devoted to this class of patients.

"The morphine should usually be administered in solution, beginning with greater or less doses, according to the nature of the case and the urgency of the symptoms. Moderate doses should generally be first tried, and they may be cautiously enlarged till the system is under their influence and the excitement is controlled. The effects should be carefully watched, and if any unpleasant or unfavourable symptoms occur, the remedy must be changed, modified or combined, so that these effects may be obviated. In a large majority of the cases no such effects will occur. When its effect is favourable, it exercises a controlling influence over the symptoms, and the patient becomes more quiet, rational and natural in every respect. These effects, once gained, can in most cases be maintained till the recovery is complete. Sometimes symptoms occur which require that the remedy be increased, but more generally it can be cautiously diminished, and after a time be withdrawn, and the system suffer no inconvenience, and the insanity prove to be cured. The time that this remedy should be used varies, in different cases, from a few weeks to many months.

"In the few cases in which it is necessary to administer narcotics, in large doses, to produce the most decided impressions, the tincture of opium is better than the salts, but generally the salts are more safe and agreeable in their effects.

"In some cases, the Dover's powder is the best form in which this remedy can be administered, especially in the early periods of disease, when the skin is inclined to increased temperature and unnatural dryness. For twelve years this remedy has been extensively used in this institution, with the most marked success.

"The manner in which the morphine has been used in this and other hospitals in this country, continuing it till the symptoms have subsided, then omitting and seeing them return, then again and again removed by the renewal of the medicine, affords unequivocal evidence of its power to subdue maniacal excitements, relieve the delusions of the insane, and restore the brain and nervous system to a sound and healthy state."

"It is rare that any benefit arises from single doses of opiates at night, to produce sleep, unless the system is kept under the influence of them the whole time. In the most violent forms of the disease, the doses should be repeated once in four or six hours. The medicine failed to gain any permanent credit while it was only prescribed at night, in large doses for the purpose of procuring sleep.

"It is important to know, in this connection, the symptoms which contra-indicate the use of this class of remedies. When the skin is hot and dry, the tongue covered with a white fur, or dry, smooth and red, the bowels obstinately constipated, the pupil of the eye greatly contracted, and the vessels of the conjunctiva injected with blood, the symptoms must be changed before the morphine can be used with safety or advantage. With the dry, red, smooth tongue, which attends comparatively few cases, the use of opiates is generally unfavourable, but the other symptoms above enumerated, can commonly be removed, or so far obviated, in a few days, as to make them unexceptionable.

"In some forms of melancholy, especially where there is great mental anguish, and strong suicidal propensity, its operation is equally beneficial, often procuring relief in a short time, and carrying the patient along most favourably to health. In this form of disease it is rarely necessary to use the remedy in large doses, but whatever is prescribed should be at regular intervals, from three to six times in the twenty-four hours."

Datura Stramonium.—This acts favourably in some cases, disappoints in others, and sometimes aggravates the symptons. "In my hands," says Dr. W., "in ordinary cases, it has not proved very successful." He then writes: "In cases of insanity connected with epilepsy, and especially in epilepsy disconnected with insanity, I have seen most excellent effects from this remedy. It is rare that a case of insanity complicated with epilepsy entirely recovers, but under the use of stramonium the symptoms of both are often greatly diminished in force and frequency. In many cases in which the paroxysms of epilepsy have recurred frequently, they have, for months, been wholly suspended by the use of the tincture of stramonium. This remedy rarely makes any favourable impression on epilepsy, unless it be used in sufficient doses to dilate the pupils of the eye slightly, and produce some difficulty of vision more or less of the time." The best form is the Tincture, either of the seeds or of the extract.

"*Conium Maculatum.*—The extract of conium, either alone or in combination with mineral tonics, is a valuable remedy, and has proved useful in some forms of insanity. As a means of removing maniacal excitement it is worthy of little confidence. But for some forms of melancholy, and especially chronic disease of the digestive organs, with melancholy or neuralgia, it often proves very useful. *It is a deobstruent narcotic of no inconsiderable power.* In cases of melancholy complicated with disease of the stomach and torpor of the liver, attended by uneasiness, restlessness, watchfulness and nervous pains, it often affords great relief, and is auxiliary in accomplishing a cure. In pure neuralgia, conium combined with iron, quinine, nitrate of silver, or the arsenical solution of Fowler, often proves a very efficient remedy. It may be advantageously used for a long time, in large doses, without danger. It is only in large doses that it is useful in any case, and particularly as a deobstruent. The *minimum* dose is ten grains three times a day, the *maximum* dose, two, three or four drachms, as frequently repeated. I have rarely found any advantage from doses less than fifteen or twenty grains, repeated three or four times a day, but commonly give from thirty to forty grains as frequently repeated.

"With the carbonate, or red oxide of iron, it is more frequently prescribed than in any other way. These two medicines when combined, qualify each other, and the combination seems to increase the efficacy of both. * * * When used in large doses the extract of conium produces temporary vertigo, with a *heavy dull* pain over the eyes and across the forehead. If this effect is never produced by the medicine, the dose is either too small, or the medicine is of a bad quality. * * * Glandular tumours sometimes disappear quite suddenly under the use of this remedy." (An interesting case is here related of the dispersion and cure of a uterine tumour "as large as a quart bowl.")

Camphor is now principally used "in combination with other moderate narcotics," to remove slight nervous irritation and induce sleep. In dysmenorrhœa, connected with insanity, or without it, it is often a useful remedy, in doses of from five to ten grains."

Hyoscyamus "is a useful medicine in some cases of moderate excitement, in disturbances of the nervous system and sleeplessness. In combination with tonics, alteratives, and other narcotics, it is useful to allay irritation and produce a quiet and equable state of the system in many forms of mental disease. In high maniacal excitement, and the extreme suffering of some cases of melancholy, it is only an auxiliary to the more powerful and efficacious remedies that we have before considered. Its virtues have probably been over-rated, but it is worth a trial in many forms of disease that do not require potent remedies. I hardly know of a remedy more likely to induce sleep in simple watchfulness, than a combination of hyoscyamus, camphor and lupuline, in equal proportions, from two to five grains each for a dose, repeated if necessary."

"*Nux Vomica* is useful in palsy, relaxation of the muscular tissues of the stomach, bowels and bladder, as well as in external muscular weakness." Dr. W. uses it in cases of melancholy with flatulence and general muscular relaxation, and combined with nitrate of silver, in affections of the heart, epilepsy, neuralgia and chorea. "It may be used in larger doses than are usually prescribed. The first unpleasant symptom arising from its use, is a sense of constriction of the stomach, which is specific, and shows that the medicine is producing some effect."

Belladonna has been but little used by Dr. W. *Veratrine*, externally applied, "relieves neuralgic pains in a surprising manner, usually producing a prickling sensation of the part to which it is applied. When used internally, it has, in some cases, produced strangury."

"*Ammonia, ether, lytta, aromatics*, &c. In some low cases of melancholy, and indeed, in some cases of high excitement, there are coldness of the surface and extremities, a moist skin, paleness or lividity of the skin, particularly of the hands and feet, a weak pulse and other indications of a languid circulation; in such cases, diffusible stimulants are often indicated. In some cases of recent dementia, in which the patient will stand like a statue, with the face fixed to the floor, moving neither hands, feet nor head, nor taking food, nor attending to the calls of nature, without being moved by another; strong stimulants, aromatics, wine and other cordials are indicated, and often produce decidedly good effects. The warm bath, frictions, mustard foot-bath, &c., are good auxiliaries in such cases." In many cases of unequal circulation of the blood, lytta, with other stimulants, is valuable. "Sometimes, even in old cases, it improves the health and gives energy to the mind."

"*Blisters, setons and issues*, produce too much irritation in recent cases; they may be useful in chronic insanity arising from repelled eruptions, or the drying up of old ulcers.

Tonics.—"In acute mania, after the first excitement is over, tonics are often indicated, and not unfrequently may be used with propriety very early in the disease." When the patient is exhausted and feeble, although still excited, "quinine, bark, aromatics, and often wine and other stimulants are beneficial, used at the same time with narcotics. In melancholy, tonics are not only more frequently indicated than in mania, but are often "the principal reliance for a cure. Iron, bark, nitrate of silver, sulphate of zinc, with vegetable bitters and aromatics, are often found useful remedies in this form of insanity. The combination of tonics and narcotics is often successful in melancholy. The extract of conium, with the red oxide of iron and some aromatics, is a useful medicine, as is also the nitrate of silver with nux vomica and extract of hyoscyamus capsicum, &c. Quinine, bark, &c., are more generally indicated in the more acute forms of disease, while iron, silver, zinc and the vegetable bitters do better in the chronic forms."

Baths.—In acute mania, the warm bath, used frequently and the patient kept in it "for some time," is often useful. In melancholy and chronic insanity, when the skin is in an unhealthy condition, it is also beneficial. Cold water to the head and warm foot-baths are important adjuvants in the treatment of insanity. The nitro-muriatic acid bath, the mustard bath and salt-water bath are also commended,—and where baths are objectionable, frequent ablution with warm water or a solution of sal aëratis in water may be substituted.

Castor, valerian, and some other *nervines* have rarely been of use in insanity, in the experience of Dr. W.

5. The report of Dr. Brigham, of the New York State Asylum, is principally occupied, statistics aside, with details of the conditions of admission of patients, and the disciplinary regulations of the establishment. This, though interesting and useful to those who are about to place a friend at the institution, furnishes but little matter for a *medical* notice.

	Males.	Females.	Total.
Patients in the Asylum Dec. 1st, 1843 - -	101	95	196
" admitted during the year - -	132	143	275
Whole number " " - -	233	238	471
Discharged and died - - - - -	102	109	211
Remaining, Nov. 30th, 1844 - - -	131	129	260
Of those discharged, there were cured - -	61	71	132
Died - - - - - - -	7	9	16

Causes of Death.—Marasmus or general debility, 7; apoplexy and sudden effusion of serum on the brain, 3; consumption, 2; and 1 from each of the following diseases: diarrhœa, chronic gastritis, bronchitis and meningitis. The whole number of patients admitted since the opening of the asylum, (two years,) is 551. Of these, 255 were single, 270 married, 17 widows and 9 widowers. The married are more numerous than the single, an uncommon circumstance in an institution for the insane.

Became insane before 20 years of age, 82; between 20 and 30 years, 215: 30 and 40 years, 135; 40 and 50 years, 68; 50 and 60 years, 33; 60 and 70 years, 16; 70 and 75 years, 2.

The mental disorder of 13 patients is attributed to "Millerism," and of 1 to "Fourierism."

The following extracts are worthy of particular notice:

"Most insane persons are injured by visits of their relatives and acquaintances. Their aversions, suspicions and troubles are often vividly recalled to their minds by such visits, and thus they are rendered much worse; or else the most painful feelings arise when their friends leave them; they become melancholy and sleepless, and, in consequence, often relapse from a state of advanced recovery. In some instances, the visits of friends are very useful; but the proper time for this kind of intercourse is soonest known to the physician who has charge of the case."

"Last year *a fair* was proposed, and the women engaged in it with such alacrity and spirit that in a short time they made a great number of curious and beautiful articles; and in January, on the anniversary of the opening of the asylum, the fair was held. From the sales, at that time, and of articles made by the women and since sold, we realized a sufficient sum to purchase a considerable addition to our library, some musical instruments, a ticket of admission for all the inmates of the asylum to the museum in Utica for one year, and also to erect a handsome green-house. The green-house we find to be an admirable appendage to our establishment. Already we have in it four hundred flourishing plants, and it is the daily resort, in winter, of many of the patients."

"But the greatest good that resulted from the fair, was the pleasure which the devising and making of various articles afforded to many of the patients and we hesitate not to say, that to several it was the means of restoration. Preparations for another are now in progress, with the like beneficial effects upon those engaged in it. We are confident that more good has resulted to our patients from their mental and bodily labour connected with these fairs, than from all the various games and plays they have ever resorted to, and they have had recourse to many, such as battledore, historical games, Dr. Busby, Mansion of Happiness, lottery games, Pickwick cards, &c. &c.

The schools "have been continued, and our confidence in their utility, and even their necessity for the improvement of many of the insane, has increased. We find that patients who have recovered here look back to their attendance in school as the greatest enjoyment they had, and often allude to it, and to the advantages they derived from it, in their letters. We believe that schools in lunatic asylums may be rendered still more useful than even we have found them, by having more perfect arrangements as regards school-rooms and school apparatus, than we have yet had."

"A manual or book of instruction, containing short precepts and maxims for the guidance of the insane, respecting the preservation of health, the government of the passions and control of the feelings, portions of which they would commit to memory, we believe would do much good, and we hope to be able to prepare such, in the course of another year. Those who have been once insane are so liable to a recurrence of insanity, that we feel as if we had not done a patient all the good we ought by curing him of one attack, but that we should endeavour so to instruct him that he may prevent another. We have great confidence, in many instances, of *man's power over himself to prevent and control insanity.* But to accomplish this, many need to be enlightened."

P. E.

ART. XX.—*Medical Jurisprudence.* By ALFRED S. TAYLOR, Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital, &c., &c. Edited, with notes and additions by R. EGLESFELD GRIFFITH, M. D., &c. Philadelphia: Lea & Blanchard, 1845. 8vo. pp. 539.

THE improvements in chemistry, the greater positiveness of information upon medical subjects, due to the adoption of the numerical system in their investigation, and the great care and attention which have been bestowed by some of the most eminent scientific men of the day upon medico-legal examinations, have caused a very rapid progress to be made in the science of medical jurisprudence. In our own country we have the excellent and standard work of Dr. Beck, at this moment the most complete and full of any in our language, and of which we hope soon to see a new edition with all the improvements and additions which have necessarily accumulated during the period which has elapsed since the publication of the last edition.

The very comprehensiveness of this work, however, is an objection to its use as a guide for students. It is important, therefore, to have some book, which, at the same time that it exhibits the state of the science as it actually is, is so condensed and free from historical details, as to enable the student to seize at once upon the doctrines and principles it sets forth. Such a work is placed within his reach by the publication under notice—a publication originally commenced by Mr. Taylor in 1836, under the title of "Elements of Medical Jurisprudence." It is, indeed, as he tells us in his preface, a new edition of that work, called for by the important additions to the science of which it treats during the last seven years; and so altered in its arrangement and typography, as to bring it within a small compass, so that it may serve as a practical manual to the medical jurist.

The plan of the work is to place those subjects first, and treat them at corresponding length, which are of greatest moment, and which are most frequently brought under the notice of the medical jurist. Poisoning, wounds and infanticide occupy the most prominent position, and have been very fully treated of; the first in some 230 pages, the second in 120, and the last in some 50 pages. The illustrations upon these and the other subjects discussed in this volume, are many of them entirely new, being derived from the author's own experience in Guy's Hospital, and from some of his former pupils; whilst, as he remarks himself, the remainder are drawn entirely from modern sources, the records of trials, and the various medical publications of Europe. This we conceive to be a very important matter, and when the materials were so abundant, as the copious citation of cases in elucidation of every point by the author shows them to be, we do not wonder that he should have selected them from fresh magazines.

Before leaving the author's preface we would cite from it the following paragraph demonstrating the responsibility attached to the duties of a medical witness, in which capacity any member of the profession may find himself called upon to act.

"When a crime, requiring medical evidence for its elucidation, is perpetrated, the duty of the whole investigation commonly devolves on the practitioner, who lives nearest the spot; it is therefore virtually upon his knowledge and experience, that the clear proof of the crime and the legal punishment of the offender must rest. He should remember that his duty lies strictly in developing the medical proofs of the crime; and he must endeavour to lay aside that feeling, which often induces us to see a criminal in every one who happens to be accused:—'*Priùs est de crimine quàm de reo inquirendum.*'—(Grotius.)

"* * * * A man may be wrongly or rightly accused; but it is for a jury to decide this point, and that medical jurist appears to me to lose sight of the true object of the science, who devotes the energies of his mind, in a case otherwise doubtful, to only one side of the question. We ought not to hear, as we have in modern times, of a medical prosecution and a medical defence. Under such circumstances, a medical jurist can be regarded no longer as the scientific witness of truth, but as the biased advocate who will spare no effort to extricate the party for whom he appears. He entirely forgets that his evidence should always be given with a view,—not to the acquittal or conviction of a particular individual, but to the vindication of justice, and the due protection of society. He appears for the country, and neither for the crown (prosecution) nor the prisoner,—at least, however defective the present mode of summoning medical witnesses may be, this is the character which it seems to me he should endeavour to maintain."

In the first 10 chapters Mr. Taylor enters upon the consideration of the general subject of Toxicology. He first shows that a substance is to be considered poisonous rather from its effects and its adequacy to cause death with symptoms of poisoning, than from the dose in which these effects are produced; that whether the local action of a poison be the chemical destruction of a part, or a paralysis of the sentient extremities of the nerves, or a simple irritation, causing inflammation and its consequences, the cause of death is to be sought for in the influence excited upon a remote organ important to life; an influence brought into action either by the absorption of the poison, or by sympathy, or by both together. He adopts the classification now generally in use among toxicologists, dividing the various substances into three great classes, irritants, narcotics and narcotico-irritants,—the first being subdivided into mineral, vegetable, and animal. The different chapters which treat of the rules to be observed in investigating a case of poisoning, of the evidence of poisoning to be derived from the living subject where the individual survives, or from the dead subject, of the evidence furnished by chemical analysis and by experiments made on the inferior animals, are most valuable and masterly productions. They condense in a brief and lucid manner all that can be said upon these subjects, and throw out most excellent suggestions which should receive the attention of every medical man, as their observance is almost essential to the proper performance of his duties as a medical witness.

Having concluded his preliminary observations, by showing that as the medical witness has merely to prove, in a case of alleged poisoning, that the death was *certainly* due to the poison, "his opinion must be based upon *medical* facts only"—the question of the administration of the article by a particular person, or of the intent, being for the jury to decide by other evidence,—Mr. Taylor next proceeds to the consideration of the particular substances employed as poisons, or which, when accidentally taken, have proved such. We cannot, in this notice, follow him further than to say that, with very slight modifications, he adopts the arrangement of Dr. Christison. He treats, first, of the non-metallic irritants, comprising the mineral acids, oxalic acid, the alkalies and their salts; deeming it more convenient to consider the last two with the acids which they resemble in their effects, than with the metallic irritants where they properly belong,—especially as the metallic bases of the alkalies never require to be shown in medico-legal investigations. The author then passes on to the description of the metallic irritant poisons, prefacing his account with the remark, "that these are distinguished from the preceding by the fact, that they are all precipitated by sulphuretted hydrogen gas, or by the hydro-sulphuret of ammonia."

These are arsenic, with the different compounds of the metal so called, mercury, lead, copper and antimony and their salts, and a number of others. So much has been said with respect to most of these, that the readers of this journal must be familiar with the recent discoveries relative to them. With respect to arsenic, in particular, which is so frequently employed as a poison, Mr. Taylor is very full, and has gleaned from every source whatever is known to be best established in relation to its tests and its reputed antidotes. He does not think very well of the hydrated peroxide of iron as an antidote, as his experiments show that its antidotal powers do not depend upon its chemical action. He says, "numerous recoveries are said to have occurred under the use of this alleged remedy, but so far as I have been able to ascertain, in severe cases, emetics and the stomach-pump were also freely used; and, in the lighter cases, recovery would probably have equally taken place without it. * * * It is upon the use of these evacuants that we must chiefly rely in treating a case of arsenical poisoning. Viscid or mucilaginous liquids may also be freely exhibited, as these will serve to suspend the poison mechanically, and to sheathe the coats of the stomach from its action," (p. 125.) As Dr. Griffith properly remarks, the experiments of others show that more reliance than Mr. T. is willing to place on it, is due to it, and that it has proved eminently successful in several cases.

In respect to the tests, Mr. Taylor does not think it necessary to produce the metal arsenic in order to have a chemical certainty of its presence; and agrees with Dr. Christison, that the reduction process is not more conclusive in the opinion of a chemist than the method by fluid tests. The simplest test, however, he considers to be that recently discovered by Reinsch, which has been found capable of detecting arsenic in any of its forms or compounds. It consists in adding a few drops of muriatic acid to the suspected arsenical solution, and then placing in it a slip of bright copper; upon this, when the liquid is made to boil, a deposit of the metallic arsenic will take place, forming a steel-gray coating.*

He next passes to the consideration of the vegetable irritants, as aloes, colocynth, &c., and from them to the animal irritants, which are cantharides and poisonous articles of food. Dr. Griffith notices here shortly the disease which has been observed in our western states, called the "milk sickness," which he is inclined to attribute to some peculiar disease of the cattle, not dependent upon any particular kind of herb on which they feed. Of the narcotic poisons, opium and prussic acid claim and receive from Mr. Taylor most attention. As respects the former he states, that notwithstanding it has been urged that the chemist should seek for the other principles, the only one which he thinks it worth his while to search out is that to which opium owes its poisonous qualities, the meconate of morphia. For this the appropriate and best tests are nitric acid, which gives a bright red colour if morphia is present in a solution, and the permuriate of iron, which gives a deep cherry colour if meconic acid is present, thus together proving the existence of both the acid and the alkali.

An account of the narcotico-irritants, which are all of vegetable origin, as nux vomica, and strychnia, colchicum, conium, alcohol, &c., closes this admirable treatise on toxicology. It is complete in every practical respect; contains all the most recent methods of searching for poisons, and while it is concise and free from unnecessary detail, is yet written distinctly and most intelligibly.

The subject of wounds is next taken up, and Dr. Taylor, in the absence of a good definition of a wound, recommends the adoption of the definition used by some of the continental authorities: "A wound includes any description of personal injury arising from whatever cause, applied externally." This would require, however, legal sanction, for the decision of the courts is, that in a wound the skin must be broken. He examines into the necessary conduct of the medical man, when called in before the death of the party wounded, into the characters of a wound inflicted during life, or made after death, and into the subject of ecchymosis, laying it down as a principle that "the presence of ecchymosis is commonly presumptive evidence of the infliction of violence; but its absence does not negative this presumption."—p. 245.

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* See Am. Journ. Med. Sciences, N. S., No. xii., p. 501. April, 1843.

The medical witness will be called upon to testify by what means the wound was inflicted, and if by a weapon, what kind of weapon was used; he will also often be required to answer whether the wound was the result of suicide, homicide or accident, his attention being directed for this purpose to its situation, nature, extent and direction; circumstantial evidence, derived from the position of the body, or of the weapon, and from the marks of blood, will often aid him materially in the formation of his opinion. He must also be prepared to say whether or not the wound was the direct cause of death; if he is the least doubtful, he had better say so at once, than wait until he is compelled to admit it. He must recollect that death may follow a wound, without being caused by it, and be prepared to show how the death can be accounted for; that death may follow indirectly from the wound, the serious consequences not at first appearing,—this result being either unavoidable, or avoidable either by proper medical treatment, or by proper care on the part of the wounded person, or but for an abnormal or unhealthy state of the body of the wounded person, or being due to a surgical operation, rendered necessary in the treatment of a case.

The period at which a wound was inflicted and the length of time the deceased survived, and the acts indicative of volition and locomotion in persons mortally wounded, may become questions of great moment in the decision of a case. They are considered in several chapters, which are followed by others on wounds as they affect different parts of the body, on fractures and dislocations, on gunshot wounds, and on burns, scalds, &c., which last closes that portion of the work which relates to the important branch of legal medicine, of which we have given the above sketch.

The subject of infanticide next receives attention; the points studied in the different chapters being the determination of the age or degree of maturity of the child, the proofs of its having lived at its birth so as to ascertain whether it was alive when it was maltreated, or of its having been born alive; how long the child survived its birth and how long it has been dead; whether the death was from natural causes or from violence, and, in the latter case, whether the violence was of an accidental or a criminal origin. We can only state that these questions are all ably and fully considered in all their bearings; a clear appreciation of the value of the different tests of the child's being born alive, and having lived after it came entirely into the world,—which it is essential to prove in order to establish the crime of infanticide,—is presented and is followed by an interesting discussion of the means of distinguishing whether the death was natural, attributable to accident, or the result of malevolent design.

Several chapters follow upon drowning, hanging, strangulation, suffocation, especially that species of asphyxia resulting from the respiration of gases unfitted to support life, as carbonic acid, sulphuretted hydrogen, as generated in drains, sewers, &c., carburetted hydrogen, &c., and deaths from lightning, cold and starvation; all of which are briefly but well treated of.

The circumstances under which medical evidence is required in cases of alleged rape and the laws upon the subject, are concisely examined in the next chapter, which is followed by one on pregnancy and delivery. The former requires to be verified in law in two cases only, one when a woman declares herself pregnant at the time of her husband's death, and the other when she pleads it in bar of execution; these points are considered, and the reader is referred by Dr. Griffith for further information to Dr. Beck's full and able exposition of the subject in its relation to delivery and infanticide. As to delivery there is more interest, from the fact that it is closely connected with charges of concealment of birth, abortion and infanticide. The first two are considered immediately afterwards—infanticide having been already noticed. The remaining chapters on this branch of medical jurisprudence are devoted to the examination of the subjects of birth, inheritance, legitimacy, superfœtation, impotency and sterility, all considered in those aspects which may require the interference of a medical witness.

The concluding chapters of this work are occupied with insanity. The nature of unsoundness of mind, and the various forms which insanity assumes, the question of the propriety of restraining or interdicting an individual alleged to be insane, and of the responsibility during lucid intervals, and an examination of the responsibility of the insane for civil or criminal acts, are each separately and carefully but concisely studied.

We are glad to see that Dr. Griffith, in a note, calls attention to the frequent use of the plea of insanity in cases of trial for murder, a plea, the success of which in this country sets the criminal at liberty. "Much of this evil," he says, "is attributable to the medical practitioners called as witnesses in these cases; as they are aware if they declare that the accused is sane, they destroy his last hopes of safety, they manage, without stating that the prisoner is absolutely insane, to leave an impression on the minds of the jury, that he was not an accountable being at the time of the commission of the crime."—p. 519.

We have now reached the end of this work, and cannot sum up our opinion of its merits in better words than those which we find contained in the preface of the American editor. "The great merit of Mr. Taylor's work is its eminently practical character, for whilst the author has omitted or merely glanced at those questions on which the opinion or evidence of the medical witness is not required, it contains the most ample and clear expositions of those embraced in the true limits of medical jurisprudence. It is, in fact, the best manual of the science we have met with for a text-book, and it may also be most beneficially referred to by the physician or lawyer, for all the important facts connected with the subject on which it treats."

Dr. Griffith was well qualified as an editor, from the long experience which he has had in relation to this branch of science, and he has executed his task with much judgment, in no case altering the text, but adding in a note whatever might be useful, either to elucidate the subject more fully or necessary to express dissent from views supposed erroneous. The publishers have done their part well, following the typographical arrangement of the English edition, and producing a handsome volume. C. R. K.

Art. XXI.—*Elements of Materia Medica and Therapeutics.* By John P. Harrison, M. D., Professor of Materia Medica and Therapeutics in the Medical College of Ohio. Cincinnati, Desilver & Burr, 1845. Vol. I., pp. 405, 8vo.

This, we believe, is the first treatise devoted to the subject of Materia Medica and Therapeutics which has issued from the western press. The aim of the author is to present the subject treated of in a summary manner, pruned of irrelevancies with which, under the name of theories, it is usually invested, and in accordance with the strict declarations of observation.

As is customary in general treatises, the preliminary chapters are devoted to a consideration of the *Modus Operandi* of Remedial Agents, Effects of Medicines, Classification of Medicines, Circumstances which modify Therapeutical Indications, and, in addition, the Theory and Art of Prescribing, Formulæ and Doses, Synopsis of Incompatible Substances, Poisons and their Antidotes, Patent Medicines and Nostrums, and Indications of Cure.

The doctrine which the author advocates is expressed in the following paragraph: "In the following discussion we have endeavoured to place the whole question on a footing conclusively vital. Physiology, Pathology and Therapeutics—these are our chief if not conclusive media of inquiry." The modus operandi of medicines is defined to be—1, the changes of sensation, function and action induced by them on the organism in a state of health; 2, the changes which they are capable of producing on the system in states of disease, which changes are subversive of disordered sensation, function and action; and, 3, their poisonous or morbid agency on the animal economy. The *anti-humoral* position is assumed in estimating the precise modes by which medicines operate, and the author belongs to the class of solidists, a small one at the present time. However well the arguments may have been brought together, deduced from the difficulties which are connected with the proof that medicinal substances enter the circulation, and, in this way, produce their effects, it does appear to us that the difficulties are not cleared up with respect to an exclusive opposite supposition, which is attended with as much unsatisfactory explanation.

The effects of medicines "in contradistinction to their modus operandi," are the "results which, flowing from their operation on the living body in health and disease, induce certain changes of a sanative or morbid character." They are, according to the author, *immediate, cumulative, local* and *extended.*

The classification of Dr. Harrison can be recommended from its simplicity. The number of classes is six, under which are arranged what may be termed the orders. These are, I. Alterants, *a.* Anti-flammatory; *b.* Anticachectic or invigorating. II. Evacuants, *a.* Blood-letting, Emetics, Cathartics. III. Incitants or Excitants, *a.* Stimulants, *b.* Antispasmodics, *c.* Tonics, *d.* Astringents. IV. Secretants, *a.* Diaphoretics, *b.* Diuretics—Antilithics, *c.* Expectorants, *d.* Emmenagogues, *e.* Anthelmintics. V. Narcotics, Anodynes, and VI. Derivatives, Revulsives, *a.* Baths at various temperatures, *b.* Frictions, *c.* Rubefacients, *d.* Epispastics, *e.* Pustulents, *f.* Suppuratives, *g.* Cauterizing—counter-irritants. This arrangement is predicated upon the indications which medicines are conceived to be calculated to fulfil, and which are in a measure set forth in the classification.

The chapter devoted to the "circumstances which modify our therapeutical indications," comprises the details usually set forth in other works—but under a different title, as for instance, the "circumstances which modify the operation of medicines." Pregnancy certainly modifies the indication, as does the existence of hernia, and it may modify the operation of medicines—but in the case where an individual is habituated to the use of opium, the action of this drug is decidedly modified, although the indication be not. We should prefer to call these the circumstances by which we are guided and governed in the employment of medicines.

Next the author treats in successive chapters of the theory and art of prescribing, &c., of incompatibles, poisons, and their antidotes, and of *Patent Medicines and Nostrums.* This last, interesting and important as the subject may be, would be better suited for an appendix than the main body of a work on Materia Medica and Therapeutics, professedly scientific. The indications of cure set forth by the author are: 1. the promotion of healthy secretions. 2. The derivation of action. 3. Reduction of the activity of the powers of life. 4. The invigoration of the vital energies. 5. The alteration of capillary action, and 6. The subdual or mitigation of pain and irritability.

The only class of remedies treated of in this volume are alterants; the modus operandi of which is explained in accordance with the previously exposed views of the author. The practical application of this class to the cure of diseases, as detailed in extenso, is that of a sensible unbiased physician. With respect to the excessive use of calomel in the treatment of fever, we quote the following paragraph to show the opinion of an experienced practitioner of the Valley of the Mississippi. "The very large doses of calomel recommended by some writers do not meet approval from the most reflecting and judicious practitioners. Of doubtful utility in extreme cases of dangerous seizure, they inflict at times, incalculable evil on the patient in ordinary attacks of fever. They are not called for; they are given without the guidance very frequently, of any sound views of the pathology of the case, under a vague, misleading conception of venous congestion of the liver." The practice and teaching of Prof. Harrison upon this point, it is to be hoped, will meet with the consideration they merit. J. C.

ART. XXII.—*The Cyclopædia of Practical Medicine: comprising Treatises on the Nature and Treatment of Diseases, Materia Medica and Therapeutics, Medical Jurisprudence,* &c. &c. Edited by JOHN FORBES, M. D., F. R. S., Physician to the Queen's Household, &c.; ALEXANDER TWEEDIE, M. D., F. R. S., Physician to the London Fever Hospital, &c. &c.; JOHN CONOLLY, M. D., late Professor of Medicine in the London University, &c. Thoroughly revised, with numerous additions by ROBLEY DUNGLISON, M. D., Professor of Institutes of Medicine in Jefferson College, &c. Philadelphia: Lea & Blanchard, 1845, 4 vols. super-royal 8vo: pp. 788, 804, 782, 770.

ENTERTAINING the high opinion we have expressed (see No. for July, 1844, p. 194) of the value of this work, we must congratulate the profession on its completion, and, at the same time, compliment the American editor and publishers for the good faith with which they have fulfilled their promises as to its appearance—a punctuality unprecedented, so far as we know, in the publication of any other work of the same character.

The four volumes contain 3144 pages of double columns, and comprise a real treasury of medical knowledge. They are furnished at so moderate a price as to be within the reach of every practitioner, and a copy should be in every medical library.

ART. XXIII.—*Remarks on the Influence of Mental Cultivation and Mental Excitement upon Health.*—By AMARIAH BRIGHAM, M. D., Superintendent and Physician to the State Lunatic Asylum, Utica, N. Y. Third Edition. Philadelphia, Lea & Blanchard, 1845: pp. 204, 12mo.

THE object of this work, as perspicuously stated by its able and accomplished author, is to awaken public attention to the importance of making some modification in the method of educating children, which now prevails in this country. It is intended to show the necessity of giving more attention to the health and growth of the body, and less to the cultivation of the mind, especially in early life, than is now given; to teach that man at every period of his existence, should be considered both as a spiritual and material being—as influenced both by physical and moral causes, and that, therefore, all plans for his improvement should be formed, not from a partial view of his nature, but from a knowledge of his moral, intellectual, and physical powers, and of their development.

The amount of physical suffering occasioned by a neglect of the truths unfolded in this work, are incalculable. The feeble constitutions—excessive nervous sensibility—and vast amount of cerebral disease met with in the young of both sexes, attest the truth of this assertion. And, after all, the attempts to over-cultivate the minds of children are fruitless, since well-developed organs and proper physical powers are necessary for the manifestation of good mental powers.

We wish that we could place a copy of this work in the hands of every parent and of every teacher in the country. It contains maxims of the highest value, and which we are happy to find are appreciated, as is shown by its having gone through three editions in this country and the same number in Great Britain.

Art. XXIV.—*Observations on the Structure and Diseases of the Testis, with numerous Plates.* By Sir Astley Cooper, Bart., F. R. S., Sergeant-Surgeon to the Queen, Consulting Surgeon to Guy's Hospital. From the Second London Edition. Edited by Bransby B. Cooper, F. R. S., Surgeon to Guy's Hospital, Lecturer on Anatomy, &c., &c., &c. Philadelphia, Lea & Blanchard, 1845: pp. 296, Pl. 24, super-royal 8vo.

The Anatomy of the Thymus Gland, with numerous Plates. By Sir Astley Cooper, Bart., F. R. S., &c., &c. From the last London Edition. Philadelphia, Lea & Blanchard, 1845: pp. 48, Pl. 5, super-royal 8vo.

The works of Sir Astley Cooper are so well known, and their great value is so universally admitted, that it would be supererogatory now to say any thing in their praise. His treatise on the Testis has always been among the most popular of his productions, from its great practical utility and the valuable original contributions it contains to our knowledge of the anatomy and diseases of that organ. Every one, indeed, who desires to thoroughly acquaint himself with the subject of which it treats, must consult it.

The work on the Thymus Gland, though of less practical utility, contains the best account we possess of the anatomy of that organ.

These two publications are issued in a splendid super-royal octavo volume, with plates executed in the best style, and should have a place in every medical library.

Art. XXV.—*The first Lines of the Theory and Practice of Surgery; including the Principal Operations.* By Samuel Cooper, senior Surgeon to University College Hospital, &c., &c. With notes and additions. By Willard Parker, M. D., Professor of Surgery in the College of Physicians and Surgeons in the University of New York, &c., &c. Fourth American, from the Seventh London Edition. New York, S. S. & W. Wood, 1844. 2 vols. 8vo: pp. 540 and 531.

The First Lines, and the Surgical Dictionary of Mr. Cooper, were the favourite books with surgical students, when we were in our pupilage, some twenty-five years ago, and notwithstanding the numerous publications which have since appeared, they still retain, and justly so, a considerable portion of their popularity.

The present edition of the first-named work is handsomely got up, and is enriched with notes, which we regret are not more numerous, by the eloquent Professor of Surgery in the College of Physicians and Surgeons, New York.

Art. XXVI.—*American Medical Biography: or Memoirs of eminent Physicians, embracing principally those who have died since the publication of Dr. Thacher's work on the same subject. With Engravings.* By Stephen W. Williams, M. D., late Professor and Lecturer on Materia Medica, Medical Jurisprudence, &c. Greenfield, Mass., 1845: pp. 664, 8vo.

We have space only to announce the publication of this volume, and to say that it contains a number of interesting biographical memoirs, some original, but the greater number collected from the medical journals and other sources.